

GRADUATE MUSEUM STUDIES CURRICULA:
MEETING THE NEEDS OF THE FIELD

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ABSTRACT

The goal of this study was to assess how graduate museum studies programs are meeting the current and anticipated future needs of the museum profession. A comprehensive assessment was conducted to determine the knowledge and skills *most emphasized* in graduate museum studies curricula and those *most valued* by leading museum practitioners. A total of 38 leading practitioners were surveyed, from lists of board members of the American Association of Museums and the American Association for State and Local History from 1991-2010. Responses were compared to those provided by a total of 32 program chairs from the 54 graduate museum studies programs across the United States. The survey took the International Council of Museums' International Committee for the Training of Personnel competencies comparing the responses of the two groups on 65 items in addition to collecting open-ended responses.

This study identified the professional personnel needs of the museum profession and found that graduate museum studies programs are meeting the needs well. For every one of the 65 competencies evaluated, museum studies program chairs indicated that their students reach a level of mastery at least as high as the level expected by museum leaders. Furthermore, two-thirds (67%) of museum leaders represented in this study believe that graduate museum studies programs are appropriate preparation for entering the museum field.

This study also found that for entry-level museum professionals, museum leaders value skills and knowledge related to museum administration and the public dimension of museums over skills and knowledge related to collections management and care. The 20 competencies *most valued* by museum leaders included none of the 18 information and collections

management and care competencies. The two highest rated competencies by museum leaders were interpersonal relationships and professionalism with median scores of 4.0 indicating a high level of knowledge or ability is expected.

This study found some differences between what is *most valued* by museum leaders and what is *most emphasized* in graduate museum studies curricula. In particular, financial management, information technology, and public program communications are most valued by museum leaders but are not among the competencies most emphasized in museum studies curricula.

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CHAPTER 1

INTRODUCTION

As of 2012, there are about 17,500 museums in the United States alone. Museums have more visitors each year than all professional baseball, football, and basketball games combined with an average of over 850 million museum visits per year. Museums have an economic impact of \$21 billion annually in the United States (2008 estimate). It is an enormous field, employing approximately 400,000 Americans (“American Association of Museums (AAM): About Museums,” 2012). Some enter museum work through academic education in a museum related academic discipline such as art, art history, anthropology, or history and gain museum-specific skills and knowledge on-the job. Increasingly, people are preparing for museum work through graduate education in museum studies.

At latest count, there were 54 graduate programs in the United States that identify themselves as “museum studies” and offer either a degree or certificate (“Smithsonian Institution Center for Education and Museum Studies,” 2011). Some of these programs offer a master’s degree in museum studies, typically an M.A. or M.S., which is the terminal degree for non-curatorial professional museum positions. Others offer a museum studies certificate for graduate students majoring in traditional museum-related academic disciplines. Some programs specialize in preparing graduates for work in specific types of museums, such as art, history, or natural history. Still others emphasize museum education, or administration. Recent decades have seen increased diversity in types of museums and increased specialization in museum positions. This same variety and diversity is reflected in graduate museum studies programs in the first decade of the 21st Century.

Graduate training in museum studies is by no means the only route for entry into professional positions in museums. Before the proliferation of museum studies programs began in the 1960s and 1970s, almost all museum professionals held graduate degrees in traditional academic disciplines related to the content areas of their museums. Typically, museum-specific skills in areas such as collections care, exhibit development, and museum education were generally learned “on the job” (Genoways and Ireland, 2003). Through much of the 20th century, there was heated debate over the issue of whether museum work even qualifies as a profession at all (Weil, 1990a). Museum workers are often referred to as “museum professionals,” but does this term refer to a professional who works in a museum (a paleontologist, an educator, a nonprofit administrator, or even a docent), or a member of a museum profession? The history of this debate is of utmost importance to museum studies as a field of study, because it feeds the debate as to whether knowledge and skills unique to museum work should be formally taught through higher education institutions, or learned on-the-job. As Parr (1960) points out, “if there is a distinct and universal museum profession, membership in that profession would logically become a matter of certifiable record, and special training programs in museum work could be established as requirements for a professional certificate” (p. 101).

A review of the literature on the history of the development of museums illustrates gradual professionalization of museum positions. This literature also shows increased specialization and a gradual diversification of the types of positions held by museum workers. In the United States, museums have shifted their focus back and forth through six overlapping historical phases (Glaser & Zenetou, 1996), from an internal focus on scholarship to an external focus on their public dimensions. Most museums have historically included research, collecting, preservation, and education in their missions, but as they have evolved, museums have greatly

emphasized certain missions and activities over others. This shifting focus and attempts to balance mission components have continuously impacted museum work, and perceptions about the types of backgrounds needed to operate museums.

Since the late nineteenth century, writers have lamented the shortage of professionally trained museum workers (see Goode, 1897; *Training for Museum Work*, 1907; Grobman, 1956; Robbins, 1969). Early writers called for museum personnel to be trained in academic disciplines, while later writers acknowledged the need for museum workers with some training in museum-specific skills. The late 19th and early 20th centuries saw tremendous growth in American museums that forced museum staffs to debate questions about the nature of museum work, and about museum workers themselves. Cushman (1984) argues that ensuing attempts by museum leaders to define standards for museum work marked the beginning of the development of the field of museum studies in the United States. Cushman examined the first five museum studies programs formed in the United States at the following institutions: The Pennsylvania Museum (undergraduate certificate program, 1908), The State University of Iowa (undergraduate minor, 1908), Wellesley College (undergraduate program, 1910), Harvard University (graduate certificate program, 1921), and The Newark Museum (graduate apprenticeship program, 1925) and argued that these programs laid the foundation for the great growth of graduate museum studies in the second half of the 20th century.

The American Association of Museums (AAM) was founded in 1907. Throughout much of its history, the AAM organized various committees on museum training beginning in 1917. In 1926, the AAM even attempted (but failed) to initiate a nationally administered museum studies program (Barrett, 1926). Out of concern by museum leaders over the rapid and haphazard proliferation of new graduate museum studies programs at colleges and universities, beginning in

the 1970s, AAM committees and the International Council of Museums (ICOM) began making suggestions for model museum studies curriculum (Glaser, 1987).

The literature on the history of museum work in the United States shows a gradual acceptance as a profession, accompanied by a legitimization of academic training in the skills, knowledge, philosophy, and ethics specific to museum work. (Genoways, 2006, Glaser & Zenetou, 1996). Many authors (Genoways & Ireland, 2003; Porter, 1991; Glaser & Zenetou, 1996) strongly support the need for graduate museum studies programs, and some take issue with those who view museum staffs as collectives of subject matter specialists. Porter (1991) and Genoways (2006) argue that because of financial pressures, museums are today less able to hire subject-matter specialists who will learn museum skills on the job as in past decades.

Museum Studies graduate programs are young, but appear to be firmly established. As Glaser (1987) points out, “Skepticism about museum studies as one route into the museum field was once the norm, but has now virtually disappeared” (p. 273). While museum studies education is not the only, or even the primary route for entering the museum profession, it is clearly accepted as a legitimate route.

A thorough comprehensive study of the curricula in graduate museum studies across the country is needed. While the American Association of Museums (AAM) has been accrediting museums since 1971, no national accreditation program for graduate museum studies programs has yet been implemented, despite several attempts in the 1970s and 1980s (Glaser, 1987). Instead, the AAM issued in 1983 its *Criteria for Examining Professional Museum Studies Programs* that included a self-study outline that defined the essential components of a graduate museum studies program. This publication and various reports by AAM committees would play an important role in shaping curriculum in many graduate museum studies programs across the

country (Glaser, 1987). Three decades later, however, these publications are quite dated, and a preliminary review of the literature reveals no recent systematic study of what is being taught in these programs. The AAM updated their 1983 report in 1985, but little recent research of a rigorous nature has been conducted as to what should be taught in these programs based either on the needs of employing museums or the perceptions of recent graduates over the past quarter century.

The central research question examined in this study is therefore, “How are graduate museum studies programs in the United States meeting the current and anticipated future needs of the museum profession?” Before this question can be studied, however, a more basic research question must be answered: “What are the current and anticipated future training needs of the museum profession?” In other words, “What knowledge, skills, and abilities (competencies) do museum leaders (employers) most expect graduates of museum studies programs to possess to meet their current and future needs?” This study thus gathers data from two distinct groups important to museum studies education: first, program chairs from graduate museum studies programs, and second, respected leaders in the museum profession. This study is organized as follows: Chapter 1, Introduction to the Study; Chapter 2, Review of the Related Literature; Chapter 3, Methodology; Chapter 4, Analysis of Results; and Chapter 5, Findings, Conclusions, and Recommendations. The following review of literature provides an examination of the history of museum work and its evolution toward status as a distinct profession; classification systems for museums; the debate over the existence of museum work as a profession; a history of museum professional training, or museum studies, in the United States; a history of the development of national and international standards for museum studies curricula; and a summary of current curricula in museum studies graduate programs.

Definitions of Terms

Collections. The objects under the care of the museum preserved and held in public trust, that form the core for educational and research activities.

Competencies. Sets of knowledge, skills, values, and abilities required for a position.

Curriculum. A set of related courses and their content.

Curator. A specialist in a particular academic discipline relevant to the museum's collections. A curator is directly responsible for overseeing policies and procedures regarding collections and loans; the care, preservation and academic interpretation of objects; recommendations for acquisitions, loans, and deaccessioning (removal of objects from collections); and research on the collections (Glaser and Zenetou, 1996).

Docent. A guide who interprets, or explains, the collections and exhibits to museum visitors. Docents are most often volunteers, but are sometimes paid staff members.

Museology. Also called museum science, it is the study of the history and background of museums, their role in society, specific systems for research, conservation, education, and organization, relationship with the physical environment, and the classification of different kinds of museums (International Council of Museums [ICOM], 1972).

Museography. The body of techniques related to museology. It covers methods and practices in the operation of museums, in all their various aspects (ICOM, 1972).

Museum. A public or private nonprofit agency or institution organized on a permanent basis for essentially educational or aesthetic purposes, that utilizes a professional staff, owns or utilizes tangible objects, cares for the tangible objects, and exhibits the tangible objects to the public on a regular basis (Museum and Library Services Act, 1996).

Museum Director. The chief executive officer of a museum. The director usually reports to the Board of Trustees of the museum.

Museum studies. The study of all aspects of the theory and practice of museum operations. The use of the term dates to the establishment of university departments in this field of study in the 1960s. It is a general term that encompasses both “museology” and “museography” (Woodhead and Stansfield, 1989).

Profession. A vocation that has met the following generally accepted attributes: (1) it involves essentially intellectual activity after long, specialized education and training; (2) it is service oriented, placing that aim before personal gain; and (3) it sets its own standards, adopts a code of ethics, and has a strong, closely knit professional organization (Hoffman, as cited in Danilov, 1994)

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

A History of the Development of Museums and Museum Work

To understand the history of the development of training for museum professionals, one must first gain an understanding of how a museum is defined, and bounded, and utilize a contextual history of the development of the modern museum and the museum worker. Today, a museum is defined by the federal government of the United States in its Museum and Library Services Act of 1996¹ as “a public or private nonprofit agency or institution organized on a permanent basis for essentially educational or aesthetic purposes, that utilizes a professional staff, owns or utilizes tangible objects, cares for the tangible objects, and exhibits the tangible objects to the public on a regular basis” (p. 15). In 1960, Douglas Allan, the late director of the prestigious Royal Scottish Museum in Edinburgh, provided a more general definition that could be applied both to what can be considered the first Western museums and to museums today. Allen said, “A museum in its simplest form consists of a building to house collections of objects for inspection, study, and enjoyment” (p. 13).

In classical times, museums were temples dedicated to the Muses, the nine young goddesses who “watched over the welfare of the epic, music, love poetry, oratory, history, tragedy, comedy, the dance, and astronomy” (Alexander, 1979, p. 6). The best known of these ancient institutions was the library and museum at Alexandria, founded by Ptomely in 280 B.C. as a center for advanced research and philosophical learning (Woodhead & Stansfield, 1989, p.

¹ The Museum and Library Services Act of 1996 merged the Institute of Museum Services, established by the Museum Services Act of 1976, and the Library Programs Office of the U.S. Department of Education, established by the Library Services Act of 1956 (Institute of Museum and Library Services, 2012).

5). While the library, or *biblion*, at Alexandria is historically important for its extensive collection of writings in a nearby building, the museum, or *mouseion*, was the central, primary institution. Many noted scholars in residence, supported by the state, occupied the museum at Alexandria. The museum housed 30 to 50 scholars who conducted research and taught students of the museum in nearby classrooms. The museum scholars were salaried, exempt from paying taxes, given free room and board, and enjoyed some “degree of academic freedom, perhaps even tenure” (MacLeod, 2000, p. 5). Besides the library, the museum may have also included a garden, zoo, and observatory (MacLeod, 2000). Like many modern museums, the ancient museums collected objects for their aesthetic, historic, or religious significance to be used in scholarly research. Many Greek and Roman temples bore a resemblance to museums, as they were often filled with gold, silver, and bronze art objects and paintings (Alexander, 1979).

According to Solinger (1990), to the ancient Greeks the word museum (*mouseion*), referred to a center of learning. While many of these museums contained collections, it was their educational and scholarly activities that made them museums. Indeed the Lyceum and Plato’s Academy were also considered to be museums by the ancient Greeks, as their primary focus was on teaching and learning. These ancient museums were staffed by “resident scholars, divided into faculties [and] supported by the state” (Solinger, 1990, p. 1). The role of ancient Greek museums, therefore, is especially relevant to a discussion of the history of academic and professional training for museum workers because in the ancient world, the museum was the source of academic education. Many of the ancient scholars residing in the *mouseion* would have also been educated in the *mouseion*.

The ancient museum had resident scholars who in some ways could be compared with modern curators, but the Middle Ages appear to offer no comparable group of museum workers.

While many works of art survived the Middle Ages, the idea of a museum as a place for the study and display of objects was nearly lost. Nonetheless, many collections of great works of art were preserved in the Middle Ages in churches and monasteries. The exploits of the Crusades increased the size of these collections as well as in the palace collections of nobles (Alexander, 1979).

The renewed interest in classical material during the Renaissance led many wealthy Europeans, like the Medici family in Italy, to establish art collections and commission new works. Some of these collections were occasionally opened to the public, sometimes for payment of a small fee (Woodhead & Stansfield, 1989). Solinger (1990) argues, however, that the concept of a public museum did not reemerge until 1671, when the first university museum opened as part of the University of Basel in Switzerland.

Scott (2006) has written extensively on the history of medieval universities. The expansion of universities into museum functions in the 17th century fits with Scott's (2006) conceptual framework for the evolution of the mission of universities. Medieval universities had fully embraced roles of teaching and research, but he argues it was not until the Early Modern Era (1500-1800) that European universities took on the mission of service to the government or nation-state. University museums fit well with the existing university roles of teaching and research, but they also played a critical role in the new role of service to the state. Furthermore, during the medieval era, universities had started applying scholastic methods of classification, analysis, and evidencing (Scott, 2006), processes that are well-served by a university museum.

The history of museums following the Renaissance was marked most by the growth of the idea of systematic collecting for scholarly purposes, and the idea of assembling collections for the purpose of making them available to the public. Oxford University opened the first public

museum in England in 1683 and the British government opened its British Museum, the oldest continuously operated state-sponsored museum and today one of the largest and most comprehensive museums in the world, in 1759 (Woodhead & Stansfield, 1989). In his 1979 study of the British Museum, J. Mordaunt Crook wrote, “the modern museum is a product of Renaissance humanism, eighteenth-century enlightenment and nineteenth-century democracy” (Alexander, 1979, p. 8). The newly established French legislature, the National Assembly, opened the Louvre Museum in 1793 following the French Revolution, expressly to make the confiscated royal collections accessible to the general public (Woodhead & Stansfield, 1989). Increased emphasis on discovering basic natural laws and forming frameworks for understanding the universe and humanity would have a profound impact on the development of many museums in the eighteenth century. Systematic natural history collections, examples of human scientific ingenuity, and great works of art were preserved in many museums for this purpose (Alexander, 1979). These objectives would soon be reflected in museums in the new United States, to which attention is now turned.

A Brief History of Museums and Museum Work in the United States

Glaser and Zenetou (1996) provide a useful framework for understanding the history of the development of museums in the United States. This framework is utilized and adapted in this study to show the evolution of professional museum work in America through six overlapping historical phases:

1. Age of the private society museum, or cabinet of curiosities (approx. 1773-1850).
2. Age of the “popular” or commercial museum, or self-education through entertainment (approx. 1815-1860)
3. Age of the academic museum, to promote research and teaching (approx. 1830-1900).

4. Rise of the more democratic public museum (approx. 1865-1930).
5. Emergence of the educational museum, which increased professionalism (approx. 1900-1980).
6. Museums as they are today, in crisis and marked by diversity (approx. 1970-present).

These six phases illustrate well the struggle that American museums have endured as they rode a pendulum back and forth from an internal focus on scholarship to an external focus on their public dimension. This shifting focus has continuously impacted museum work, and in turn therefore the types of educational backgrounds needed to operate museums. For this reason, the framework presented by Glaser and Zenetou is used below, with the caveat that these observable periods often overlap as museums in America evolved.

1. The Age of the Private Society Museum (approx. 1773-1850). The first American museums were either society museums or private collections opened as museums by wealthy collectors who were often self-taught “scholars” (Woodhead & Stansfield, 1989). In 1773, The Charleston Museum became the first museum founded in the American colonies. The Charleston Library Society founded the museum “to collect materials for a full and accurate natural history of South Carolina” (Alexander, 1979, p. 47). A staff of four “curators” cataloged and studied geologic, plant, and animal specimens, as well as Native American artifacts (Alexander, 1979). Having dedicated its early years to collecting and research, the Charleston Museum did not open to the public until 1824, over 50 years after its establishment. In 1852, Harvard scientist Louis Aggasiz declared the Charleston Museum’s collections to be among the finest systematic research collections in America. The museum temporarily shut down during the Civil War, but the Charleston Museum still exists today as a self-governed not-for-profit organization and is

acknowledged as the nation's oldest chartered public museum ("The Charleston Museum", 2009).

The best and perhaps most famous example of a private collection opened to the public as a museum was Charles Willson Peale's Philadelphia Museum, more commonly called the American Museum. Alexander asserts that Peale was a "kind of universal scholar" (1989, p. 48), an accomplished artist and student of nature. In 1786, Peale announced that he was forming a museum in Philadelphia that would be a "repository for natural curiosities" and "the wonderful works of nature" (Alexander, 1979, p. 48). Peale's personal papers, which this author has examined in this literature review, include many letters related to the purchase or request of donations of items for his museum collection. His extensive correspondence provides great insight into Peale as a museum director, and shows his relentless efforts to acquire collections and to develop appropriate and professional preservation methods for his museum. Peale's papers also illustrate his strong beliefs on the need to preserve natural curiosities, and to keep these specimens in the United States rather than being shipped to previously established museums in Europe (Peale, 1786/1983). In a letter dated December 31, 1786 to General George Washington, less than three years prior to his becoming the first President in 1789, Peale wrote:

I have lately undertaken to form a Museum and have acquired the means of preserving in the natural forms, Birds, Beasts and Fish, my intention is to collect every thing that is curious of this Country, and to arrange them in the best manner I am able, to make the Collection amusing and instructive, thereby hoping to retain with us many things really curious which would otherwise be sent to Europe (Peale, 1786/1983).

Peale went on to explain that he had learned that Washington had acquired some live exotic birds from China, and asked him should any of them die, to please send them for his

museum so that "...such beautiful and rare things should not be wholly lost...which [happens] too often, [sic] even when undertaken by persons not sufficiently skilled in the manner of preserving" (Peale, 1786/1983). Washington promptly agreed to donate specimens to Peale's museum in a letter dated January 9, 1787, and lamented that they may be coming soon, as his exotic birds were in poor health, and they "...all appear to be drooping" (Washington, 1787/1983). Washington's bird specimens may not have been preserved, however, as Peale's papers reveal he spent several frustrating years experimenting with early taxidermy techniques. In a letter dated February 1, 1790, addressed "To the Citizens of the United States of America," Peale formally introduced and announced his new museum stating that he intended to increase the size of his collection, "The difficulties in preserving subjects being thus overcome..." (Peale 1790/1983).

By 1802, Peale's museum had outgrown first his home, then a portion of the American Philosophical Society's building, and was moved into a portion of what is today Independence Hall. That his new museum could occupy this hallowed space rent-free by a unanimous vote of the Pennsylvania Legislature speaks to the standing Peale had earned in the eyes of his countrymen. The American Museum soon became one of the leading public attractions in the eastern United States. Peale, typical of private collectors who opened museums, was a self-taught master of taxonomic cataloging, taxidermy, and exhibition techniques (Alexander, 1979), and well exemplified the age of the private society museum.

2. *The Age of the "Popular," or Commercial, Museum (approx. 1815-1860)*. In the age of the popular museum, many American museums became less focused on academic pursuits, instead making remarkable progress in becoming more audience-focused. Glaser and Zenetou (1996) describe the opening of P.T. Barnum's American Museum in 1841 in New York City as a

defining event in this era. Barnum, reflective of the age of the commercial museum, was first and foremost a businessman, with a diverse entrepreneurial background. Before opening his museum, he had been involved in real estate, owned a general store, sold books, operated a lottery network, and had published a newspaper, according to his biographers Kunhardt, Kunhardt, & Kunhardt (1995).

Barnum commercially exploited the emerging demand for popular educational entertainment with his peculiar collection of exotic curiosities. Besides featuring displays of geological and biological collections, Barnum's museum featured performances of "midgets, fleas, snakes, whales, and a white elephant from Siam" (Glaser & Zenetou, 1996, p. 14). Barnum exhibited what could be considered the first museum dioramas, the three-dimensional recreations of scenes, replete with wax figures and panoramic backgrounds (Glaser & Zenetou, 1996). Barnum would eventually purchase the collections of other private museums, including Peale's famous American Museum whose name he would appropriate. By 1846, Barnum's American Museum drew over 400,000 visitors per year (Kunhardt, Kunhardt, & Kunhardt, 1995), at a time when New York City's population totaled only 312,710 according to the 1840 census (U.S. Bureau of the Census, 2009). Barnum was caught in several hoaxes that severely damaged his credibility, however, the most famous of which was a bogus mermaid shown in 1842. Ever the entrepreneur and promoter, Barnum defended his hoaxes as "advertisements to draw attention" (Kunhardt, Kunhardt, & Kunhardt, 1995). He felt justified in using sensationalism to attract an audience that then could be educated. Glaser and Zenetou (1996) argue that Barnum was indeed education-minded and "openly invited skepticism, challenge, and debate, ... a genuine pioneer in his understanding of the educational and entertainment power of museums" (p. 14).

3. *The Age of the Academic Museum (approx. 1830-1900)*. Prior to the late 19th century, many early museums in the United States had been staffed and led by private collectors or subject-matter scholars who often served in the roles of custodian, curator, director, and sometimes entrepreneur all rolled up into one. It was not until the 1870s and 1880s that a real division of labor emerged with the development of the position of museum curator, a critically important step in the evolution of museum professionalism. In his seminal work, *The Museum in America: A Critical Study* (1939), a landmark three-volume report that in many ways defined museum professionalism, Laurence Vail Coleman, who served as director of the American Association of Museums from 1927 to 1958, observed that “before the 1870s, museums were very simply run. Amateurs collected and put their stuff behind the glass of built-in exhibition cabinets. Taxidermy was bought outside, like a haircut. Educational work consisted principally of opening the door” (p. 395). Glaser would later observe in 1993 that “a museum position was [historically] more or less accidental, by self-appointment, or occasionally by a board of trustees. But there were no position descriptions, and certainly no written qualifications for the job” (p. 18).

In their 1996 work, Glaser and Zenetou wrote that the age of the academic museum in the United States was marked by the development of university museums and the National Museum (Smithsonian Institution), shifting the focus of museum work back toward a more scholarly purpose. By the late 19th century, a number of leading American universities had substantial museums of art or natural history that served as important repositories of materials central to faculty academic research. Regarding professional staffing, the development of university museums allowed for the emergence of curators who often held joint positions in the museum and in an academic department (Alexander, 1979). Natural history museums dominated this era

as the American west was being settled because, as Conn (1998) suggests, “The link between American expansion, museums, and the natural history which provided the intellectual framework for both underscored that, while the vast expanse of the American frontier was tamed physically, it needed intellectual conquering simultaneously” (p. 34). Put differently, the cities of the eastern seaboard were fascinated by images of the American west.

While most early university museums in the United States were dedicated to the natural sciences, the earliest museum on a college campus was an art museum, the Trumbull Gallery, founded at Yale University in 1832. John Trumbull was a historical painter and portraitist who sold his collections to Yale University in 1831 contingent on the construction of an art gallery on campus, which he would design (“Yale University Art Gallery”, 2009). It is interesting that as the Trumbull’s art collections grew, they began to focus on natural history-themed art, reflective of the national interest in the natural sciences at this time (Glaser & Zenetou, 1996), because Yale University had just four years earlier resolved its commitment to liberal, classical education over practical and scientific education in its famous Yale Report of 1828 (Rudolph, 1962).

It is also interesting to note here that the movement in American higher education against the classical course of study and its lack of attention to the more practical sciences in the early 19th century actually helped spur the formation of natural history museums at many universities. Great excitement and a competitive spirit were demonstrated by some of these universities over the building of their museum collections. As higher education historian Frederick Rudolph points out, “Princeton in 1805 was able to summon as much enthusiasm as was later reserved for a football game with Yale when a superior natural history collection was purchased from a French collector in New York” (Wertenbaker, 1946, as cited in Rudolph 1962, p. 226). By 1835, according to Rudolph, student-organized literary societies at American universities began

building book collections that outnumbered those in their college libraries. Many of these societies, such as the one at Williams College, also began building collections of natural history specimens in the 1840s. These student-run natural history museums were a direct response to the classical course of study that was still the norm at most colleges at this time (Rudolph, 1962).

According to Conn (1998), some mid-19th century scientists such as Louis Agassiz at Harvard believed that scientific research had become stale at American universities. Agassiz believed that great museums “would make American universities competitive with European ones [and that] a great museum collection would even draw students from Europe to study in the United States” (p. 55). While many universities formed natural history museums in this era, Conn (1998) suggests that Agassiz’s “goal would seem a faded memory indeed” (p. 56) by the end of the 19th century. The renewed intellectual life of American universities, according to Conn (1998), was not attributable to university museums, but rather to the leadership of outstanding “university administrators such as Charles Eliot Norton at Harvard, William Pepper at Pennsylvania, and Daniel Coit Gilman at Johns Hopkins” (p. 56). Conn (1998) points out that universities began to challenge museums for intellectual leadership in the United States, resulting in healthy intellectual competition for “which kind of institution would function to produce new knowledge, and which would simply diffuse the old” (p. 56).

The beginnings of the United States National Museum, what became the Smithsonian Institution, go back to the bequest of James Smithson, the Duke of Northumberland, “to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men” (Woodhead & Stansfield, 1989, p. 7). An Act of Congress created the Smithsonian in 1846, and Joseph Henry, perhaps the leading American scientist at the time, was chosen to direct the

institution as its first Secretary. Alexander (1979) argues that Henry viewed the increase of knowledge through original research as more important than the diffusion of knowledge. The Smithsonian primarily functioned from 1846 until 1879 as a national center of research, and not the public museum we know today. An examination of Henry's papers, however, reveals that he repeatedly cited the lack of funds as the primary reason for his opposition to the expansion of the Smithsonian's museum functions. In an 1853 letter, for example, Henry wrote, "In the development of the plan it has become evident that the support of a large library and an extensive museum is incompatible with the limited income of the institution and that these objects must be provided for by other means" (Henry, 1853/1998).

External pressures for a national natural history museum, as well as internal pressures from Henry's assistant secretary, Spencer Fullerton Baird, resulted in the expansion of the Smithsonian's museum functions (Alexander, 1979). Exhibits opened in 1858 at the Smithsonian's "Castle" building on the National Mall in Washington D.C. helped the Smithsonian Institution to earn its official designation as the United States National Museum by an act of Congress in 1879 (Woodhead & Stansfield, 1989) under the direction of Baird, who succeeded Henry as Secretary (Alexander, 1979). Besides being a skilled administrator and respected scientist, Baird was an effective lobbyist. As his 1915 biography describes, "Professor Baird won a reputation for simple straight-forwardness and scientific worth which gave him great influence with the best men at the Capitol" (Dall, 1915, p. 235).

While Baird was quite successful in expanding the public role of the Smithsonian with the establishment of the National Museum, the research aspects of the mission remained central, however, and the Smithsonian employed large ranks of scientists as curators and researchers. According to Coleman (1939), the Smithsonian had "assistants in mineralogy, ornithology, and

zoology from 1874, and out of this beginning its scientific staff emerged step by step” (p. 395). Many of the Smithsonian scientists were moved under the administration of the museum after its establishment and given the title of curators. By 1884, just five years after the organization of the National Museum, according to the Smithsonian annual report there were 19 curatorships, each functioning as a department of the museum reporting to Baird, director of the museum. These curatorships included disciplinary areas such as ethnology, mammals, birds, fishes, American prehistoric pottery, arts and industries, invertebrate fossils, and mineralogy (Smithsonian Institution, 1884). By 1884, the Smithsonian was also increasing the size of the museum’s Department for Exhibition Work, established since 1882, but the annual reports from this era focus much more on the work of the scientific staff (Smithsonian Institution, 1881, 1884, 1888). At the same time, according to Coleman (1939), other prominent museums such as the American Museum of Natural History (AMNH) in New York were expanding their scientific staffs. The AMNH appointed its first curator, a geologist, in 1877 and by the end of the 1880s, had nine full-time curators in specialized areas of scientific inquiry.

4. *The Rise of the Public Museum (approx. 1865-1930)*. The transitional period between Glaser and Zenetou’s (1996) academic museum era and the public museum era saw the emergence of another important museum leader as George Brown Goode was appointed the executive officer of the National Museum at the Smithsonian in 1881. An ichthyologist by training, Goode spent most of his professional career as an exhibits specialist, having previously organized major exhibitions at world’s fairs and expositions. Like others at the time, he entered museum work through an academic discipline and learned museum skills through experience. Throughout his career Goode stayed active as a respected scholar, writing “more than two hundred articles and many books on a great variety of subjects, both scientific and historical”

(Alexander, 1995, p. 283). Alexander (1995) explains, however, that while most of Goode's academic colleagues "thought scientific research as justification enough for a museum" (p. 288), he did emphasize the public role of museums. In the 1881 Smithsonian Annual Report, Goode stated that "public institutions of this kind are not intended for the few, but for the enlightenment and education of the masses" (p. 83). According to Alexander (1995), Goode felt that "the kind of museum he visualized had not yet been achieved anywhere" (p. 288).

While the Smithsonian Institution was expanding into a more public role at the beginning of the public museum age, Glaser and Zenetou (1996) suggest that this era is best characterized by the founding of many of the nation's most important art museums. Beginning in the mid-late 19th century, American art museums became the direct beneficiaries of vast fortunes amassed by American industrialists of the Gilded Age. Examples include the Metropolitan Museum of Art in New York, the Art Institute of Chicago, the Carnegie Museum of Art in Pittsburgh, and the Detroit Institute of Arts funded by the fortunes of men such as William Henry Vanderbilt, Charles Lawrence Hutchinson, Andrew Carnegie, and James Scripps. Also in this era, the educational responsibilities of museums became widely recognized, and city and state governments began to subsidize many museums, and the first state museums were established as well (Glaser & Zenetou, 1996). As Glaser and Zenetou (1996) point out, in New York, "city fathers issued an edict that museums should be as important and beneficial an agent in the instruction of the people as any of the schools or colleges of the city" (p. 16). The era of the rise of the public museum saw much increased professionalism in American museums, as curators trained academically in specialized disciplines, already common in university and large national public museums, became employed at museums of various size and disciplinary foci (Glaser & Zenetou, 1996).

5. *The Emergence of the Educational Museum (approx. 1900-1980)*. It was in the early 20th century that museums in the United States fully blossomed as educational institutions for public service. During this time, separate children's museums emerged, and existing museums began to start educational programs designed for children. According to Glaser and Zenetou (1996), the Newark Museum, founded in this era in 1909, was considered the nation's first "community museum...reaching out to minorities, the disadvantaged, and the uneducated" (p. 18). Museums continued to see enormous growth in the 20th century. Many of the nation's most significant museums opened in the years immediately following World War II and the growth continued for a number of years. A new museum was founded every 3.3 days in the 1960s (Glaser, 1987).

Greater diversity in types of museums and increased emphasis on educational functions resulted in ever-increasing specialization in museum work in the eras of the public museum and the educational museum (Glaser & Zenetou, 1996). Throughout the 20th century, many of today's common museum professional positions emerged to join the already established curatorial and administrative positions. These positions include titles such as museum educator, museum outreach coordinator, volunteer coordinator, exhibit designer, exhibit preparator, museum registrar, collections manager, and conservator (Danilov, 1994).

In describing the tremendous growth and professionalization of American museums in the late 19th and early 20th centuries, Cushman (1984) points to the profound social and economic changes of the era. According to Cushman, "Increased population, urbanization, economic prosperity, more leisure time, and a growing emphasis on popular education resulted in an unprecedented demand for 'uplifting' leisure pursuits" (p. 8). These factors spurred the proliferation of world fairs, chautauquas, exhibitions, and museums. Cushman points out that the

increased attention placed on museums forced museum staffs to debate questions about “institutional purpose, collecting, and audience—and about museum workers themselves. Should museum workers be experts or generalists? Should they be trained in schools or museums? Should they be trained at all?” (p. 8). Cushman argues that the ensuing efforts by museum leaders to define standards and methods by which individuals could be best prepared for careers in museum work marked the beginning of the development of the field of museum studies in the United States.

6. *Museums in crisis and marked by diversity (approx. 1970-present)*. Museums today are often referred to as reflective. Self studies, strategic planning, and staff and board retreats are tools commonly utilized by museums to examine their purpose, mission fulfillment, and their role in community and society. Questions commonly asked include: Should collections be expanded when storage facilities are inadequate? Are efforts to make exhibitions entertaining overshadowing education? What constitutes excellence in museums, and who should set or enforce standards? (Glaser & Zenetou, 1996). From 1982 to 1988, the W.K. Kellogg Foundation and the Smithsonian Institution collaborated on a major national project to examine museum excellence. Also in the 1980s, the W.K. Kellogg Foundation sponsored similar initiatives related to museum excellence at the Exploratorium, a hands-on public science museum in San Francisco, and the Field Museum of Natural History in Chicago (Glaser & Zenetou, 1996).

In discussing the rapid proliferation of museums in the late 20th century, Wittlin (1970) raises questions of quality calling for a “moratorium on the expansion of buildings, and on the acquisition of additional gadgetry until we know more about the benefits people derive from what is going on in museums, or what could and should go on...Do we always know what kinds of misfits are created in addition to institutions of excellence?” (pp. 216-217). Wittlin goes on to

suggest that the museum profession should question the contributions that museums make to human well-being. She raises the provocative question, “Would we invent museums if we did not have them?” (p. 217). The self-examination of museums in the late 20th and early 21st centuries has resulted in increased professionalism, training, specialization, and emphasis on ethics and standards, all factors that contributed to rapid growth in the number of formal graduate museum studies programs in higher education and to mid-career training programs (Glaser & Zenetou, 1996).

The recent reflective era in which museums sought to redefine themselves has changed the nature of museum work. Patrick J. Boylan (2006), Professor Emeritus of Heritage Policy and Management at City University, London writes that the rapid growth in museum employment in recent years can be attributed not only to the creation of new museums, but also to the “increasing complexity and specialization of museum work” (p. 417) in traditional areas such as exhibition, collections management and conservation and the “expansion of the museum’s role into new important areas of responsibility, particularly the increasing recognition that museums must accept a far wider educational and social role within their society and community” (p. 417). Museums around the world have not only reached out to, but involved, previously underrepresented disadvantaged peoples and have expanded their activities to include empowerment of these peoples (Boylan, 2006).

Boylan (2006) suggests that the recent changes in the nature of museum work have challenged the professional establishment in the museum field. The rapid diversification of the roles of museums and museum workers has “often been very challenging and unsettling” (p. 420) to an entire generation of “scholar-curators” (p. 420). Boylan cites statistics for museums in the United Kingdom where the number of traditional curators employed in museums has fallen

from around 30 percent of the museum workforce to below 12 percent while there has been a doubling of museum workers in other areas such as education, exhibition, conservation, management, marketing, and fundraising. Similar patterns are found in many other countries, including the United States, where a 1996 museum careers guide published by the Smithsonian Institution's Office of Museum programs described over 60 distinctive museum jobs (Glaser and Zenetou, 1996). Boylan suggests, "Traditional curators are inevitably feeling very much under threat in the face of such drastic changes" (p. 421).

The Classification of Museums

One of the first classification systems for types of museums was proposed in 1895, and published in an 1897 report by George Brown Goode. Goode at this time also served as Assistant Secretary of the Smithsonian Institution in charge of the National Museum. He suggested that museums could be classified in two ways: by the nature of their collections, and by the "purposes by which they are founded" (p. 208). Under Goode's system, museums classified by the nature of their collections could be divided into the following categories: art, historical, anthropological, natural history, technological or industrial, and commercial museums. Goode also identified categories for museums according to their founding purpose, or more specifically, their governing bodies: national museums; local, provincial, or city museums; college and school museums; professional or class museums; and private museums, or cabinets. Under Goode's classification system, there is obviously overlap, both in the two major classifications, and in the sub-classifications. For example, a college museum can also be classified according to the nature of its collections, such as art or natural history. Within the sub-classifications, for example, an art museum can also be a historical museum (Goode, 1897).

In 1939, Laurence Vail Coleman, director of the American Association of Museums from 1927 to 1958, offered a similar classification system for museums. Like Goode, Coleman classified museums by field, or discipline, and by control, or governing body, but he added major classifications for “special types of museums” (p. xviii) such as children’s museums, historic house museums, and park (trailside) museums and “sub-museums” (p. xviii) such as libraries with exhibits (Coleman, 1939).

Genoways and Ireland (2003) argue that in our current times, museums can first be classified into two broad categories: non-collecting and collecting institutions. Museums that do not collect can include children’s museums, nature centers, planetariums, and science centers. Collecting museums can be divided into two broad categories: those that hold nonliving collections and those that keep living collections, like zoos and aquariums. Like Goode (1897), Genoways and Ireland describe that museums holding nonliving collections can be classified according to disciplinary areas (history, art, natural history, etc.), or by parent organizations and governing structure (private not-for-profit, city, state, national, university, etc.). Genoways and Ireland (2003) add, however, that museums today can also be classified by user, for example, children’s museums.

Today, the most widely used system of classifying museums is a list of categories developed by the AAM for its annual Official Museum Directory (Fanning, 2009). The list includes categories based on user, disciplinary area, and governing structure (see Appendix A). It should be noted that although these categories are widely used, this list is extensive and quite liberal in its inclusion of types of institutions. For example, it includes categories such as wildlife refuges, libraries with collections of books, and company museums, even though these

institutions would not likely meet the definition of a museum from the federal Museum and Library Services Act of 1996 as cited on the AAM website (“AAM”, 2009).

Debate over the Existence of Museum Work as a Profession

According to the American Association of Museums, museums currently employ 400,000 Americans (“AAM: About Museums,” 2012). It is an enormous field, yet some have argued since the early 20th century over the issue of whether museum work qualifies as a profession at all. Museum workers are often referred to as “museum professionals,” but many use this term to refer to any professional who works in a museum, while others use it to describe members of a museum profession.

This is an important distinction, as the debate is relevant to museum studies, because the wide general acceptance of the existence of a museum profession is vital for the legitimization of museum studies as a field of study. The acceptance of the idea that there is a body of knowledge, skills, values, and philosophies unique to museum work not only supports arguments in favor of the existence of a museum profession, but it feeds the debate over whether these things should be learned academically, or on-the-job.

Many people who work in museums, especially curators, tend to strongly identify with their discipline. A curator of archaeology, for example, is an *archaeologist*. A museum educator is an *educator*. A museum development officer is a *fundraising professional*. Historically, museum administrators rose through the curatorial ranks. Before the rapid growth of graduate museum studies programs in the 1960s and 1970s, most museum workers were trained in their disciplines and learned museum philosophy, values, traditions, ethics, and museum administration skills on-the-job. While museums now employ many graduates of museum

studies programs, they also employ many who have followed the more traditional model of disciplinary-based education in academic specialty disciplines (Genoways and Ireland, 2003).

The debate over the existence of a museum profession is not new. In 1919, The AAM Committee on Training Museum Workers reported in a statement, “museum work should be looked upon as a profession and that the standard of equipment and scholarship demanded of its members should be high” (AAM Committee on Training Museum Workers, p. 87). A different opinion was held by Alexander Ruthven, museum director at the University of Michigan in the 1930s and later President of the University (Reimann, 1967), who once said, “A museum man is a professional botanist, geologist, archaeologist, business man, teacher, etc. ...He cannot be a professional museum man, for his institution can only serve the world through the efforts of specialists, in particular fields of knowledge” (Genoways and Ireland, 2003, p. 7). Some have grown tired of the debate. Teather (1991) points out an Australian museum director attending the Canadian Museums Association annual conference in 1990 threatened that “if one more person raised the question of whether there actually was a museum profession, he would take out his gun and shoot them” (p. 409).

Perhaps the most cited author in this debate is the late Stephen Weil, a highly regarded writer on museums. A noted museum and art law expert, he served for many years as the deputy director of the Hirshhorn Museum and Sculpture Garden, and was the scholar emeritus at the Smithsonian Institution's Center for Education and Museum Studies. In his popular book, *Rethinking the Museum* (1990a), Weil devotes a chapter to the issue of the existence of a museum profession. Weil argues that the struggle by American museum workers to gain professional identification has caused many significant improvements in American museums, but much remains to be done before American museum work can properly be called a profession.

Weil points to the problem of diversity of disciplines among museums, and the diversity of knowledge and skills required within particular museums as an enormous obstacle. With such variety, Weil and others have questioned the existence of any unique body of knowledge that could be found in every type of museum that could serve as a common unifying basis for a museum profession.

In another chapter, Weil (1990b) cites sociologist Harold Wilensky (1964) to support his argument that museum work is not a distinct profession. Wilensky argues that there are two basic criteria of distinction for professional status: “[First], the job of the professional is technical-based on systematic knowledge or doctrine acquired only through long prescribed training. [Second], the professional man adheres to a set of professional norms” (Wilensky, 1964, p. 138). The systematic knowledge and doctrine that Wilensky describes is so specific that it could not easily be transferred to other occupations. Wilensky argues that while there may be a strong tendency for occupations to seek true professional status, only a few of the thousands of occupations in modern society had attained it in 1964. Lawyers, clergymen, doctors, and university professors qualified as professionals since the Middle Ages, but they were alone in this regard until the 1800s when additional occupations such as dentistry, engineering, and architecture developed to the point that they could be considered professions. Wilensky argues that perhaps only 30-40 modern occupations qualified as professions by 1964. Weil (1990b) suggests that most sociologists would add to Wilensky’s strict criteria for distinction as a profession

the attribute of autonomy... The practitioners of the profession may actually prescribe and monitor the preparatory training for the field, control the entry of new practitioners, and

not only promulgate standards of achievement and conduct but also enforce these standards by imposing sanctions upon those who violate them (pp. 172-173).

Weil (1990b) suggests that the issue of autonomy poses a problem for museum work in its struggle for professional status because of the nature of the organizational setting of museum work. A scientist serving as a curator in a museum does not enjoy the same autonomy as a tenured university professor or a medical doctor in private practice. The 1978 AAM *Museum Ethics* code, first published in 1925, stated that a museum staff member cannot be required to “suppress his professional judgment in order to conform to a management decision” (p. 23), but as Weil (1990b) points out, “What this provision fails to acknowledge is the swiftness with which a nontenured employee who consistently fails to conform to management decisions may become a *former* employee” (p. 177).

Weil’s arguments are supported by two articles by Albert E. Parr in the 1960s, *Is there a Museum Profession?* (1960) and *A Plurality of Professions* (1964). Parr (1960), then the senior scientist of the American Museum of Natural History (AMNH) in New York, studied the career paths of 162 employees of the AMNH between 1939 and 1959 to see if their movement from job to job before and after their employment at the AMNH was in museums. He argued that if a significant number of respondents were moving from one museum position to another, it would show that they were part of a museum profession. If, however, curators moved to and from university positions, educators moved to and from school teaching positions, and exhibit designers moved to and from more general design positions it would provide evidence against the existence of a strong museum profession. Parr found that in each of the four categories of museum personnel that he studied (curatorial staff, exhibition preparators, exhibition designers, and teaching staff), respondents had moved freely to and from museum positions and positions

outside of museums. For example, out of 29 curators, only four worked in museums before and after their employment at AMNH, while 24 of these curators worked as faculty in colleges and universities before and after their employment at AMNH. Out of 77 members of the AMNH teaching staff, only 19 worked in museum positions before and after their employment at AMNH, while 34 worked in elementary and high schools before and after their employment at AMNH. Parr concluded that his study provided no evidence that these museum workers “belong to professions that are in any way peculiar to the museum world” (Parr, 1960, p 104).

In his 1964 article, Parr did argue that those who work in museums *were* professionals, but not members of the *same* profession. To give up some of their identity as academic specialists, exhibit designers, or educators would not be good for their personal professional standing, or for the advancement of museum functions, Parr argued, adding that it is largely museum directors who argue for the existence of a unifying profession, creating a “growing suspicion that we are all being invited to join the army in order to protect the *status quo* of the general staff” (p. 294). Parr suggested that, “the best way to promote the welfare and progress of museums, and all who work for them, is not by attempting to homogenize our careers and force us all into the mold of a single profession. In that direction lies stagnation” (p. 294). The best way to promote the progress of museums, according to Parr, is to embrace and celebrate the diversity of professions “and sometimes conflicting personal interests” (p. 294) represented by museum workers.

Weil argues that the four most evident failures of museum workers in pursuit of professionalism are individual autonomy, supervision of preparatory training, entry of new practitioners into the field, and enforcement of ethical standards (Weil, 1990a). Weil acknowledges, however, that much progress has been made toward recognition of museum work

as a profession. He identifies four areas of great success: first, a common attitude of altruism in museum work; second, the establishment of strong national, regional, and local “organizations to deal directly with professional concerns” (p. 77); third, having a strong national museum accreditation program; and fourth, the dissemination of standards of ethical conduct. It is important to note that Weil also acknowledges that many museum workers now consider themselves part of a profession, and that “in the official literature of the American museum field, it has long been taken for granted that museum work is *already* well recognized as a single and distinct profession” (Weil, 1990a p. 75). For example, the 1925 American Association of Museums *Code of Ethics for Museum Workers* contained neither the word “professional” nor “profession” anywhere in it (AAM, 1925), while the 1978 and 1991 codes of ethics make repeated references to “professionals” and “professionalism” (AAM, 1978, 1991).

Genoways and Ireland (2003) argue that while a number of writers such as Parr (1960, 1964) and Weil (1990b) have denied the existence of a museum profession over the last century, many others (Coleman, 1939; Alexander, 1979; Danilov, 1994) have argued that a sufficient body of knowledge specific to museum work exists to warrant professional status. Genoways and Ireland acknowledge that there is great specialization and diversity of backgrounds in museum work, but they emphasize the importance of shared values and distinct professional ethics as criteria for professional status. They explain, “If we use the standards that define a profession in conjunction with these common values, the shape and existence of the museum profession become obvious” (Genoways & Ireland, 2003, p. 8).

The development of museum work as a profession can be compared to the development of the professoriate in American higher education as a profession. Veysey (1965) points out that the development of major American universities after 1890 saw the “arrival and entrenchment of

a new profession on the scene,” (p. 258) as higher education claimed 40,000 faculty members in 1910. Professors began to think of themselves “in matter of fact terms as professional men” (p. 442). The development of the professoriate as a profession is closely tied, according to Veysey, to “taking on a psychology” (p.442) in higher education that was unique from other professions. Veysey’s observations are closely aligned to the development of “shared values and distinct professional ethics” (Genoways and Ireland, 2003) used as evidence of the emergence of professional status for museum work.

Genoways and Ireland (2003) point out that while many enter the museum profession through higher education degree programs in museum studies, others who take a discipline-based route may or may not become members of the museum profession. The key determinant is whether they keep the values and norms of their academic specialization, or adopt the values and norms of the museum profession. From this perspective, “not all people working in museums (even some who have been employed by museums for long periods of time) are members of the profession” (Genoways & Ireland, 2003, p. 8).

In *Museum Philosophy for the Twenty-first Century* (2006), Genoways says, “The museum profession may be in its early stages of development, but it is established and there should be no returning to the pre-professional days” (Genoways, 2006, p. 222). Genoways cites Hilde Hein who writes, “Such controversy notwithstanding, a professional structure is now in place with national and international representation, numbering thousands of institutions and individuals who communicate regularly among themselves through publications and programs and it has resulted in a de facto profession” (2006, p. 222).

In his 1994 book, *Museum Careers and Training: A Professional Guide*, Danilov presents both sides of the argument, admitting that one’s interpretation of the definition of a

profession may be the most important determinant. But, adds Danilov, “there appears to be little doubt that many aspects of museum work are professional in nature and require specialized training and experience” (p. 15).

In *The System of Professions* (1988), sociologist Andrew Abbott discusses the emergence of professions and the role of higher education. He proposes an alternative model to prevailing theories on the development of professions, focusing on the work itself rather than formalization of structure. As Abbott states, “The central phenomenon of professional life is thus the link between a profession and its work, a link I shall call jurisdiction” (p. 20). Regarding the relationship between academic knowledge and jurisdiction, Abbott argues that the prestige of knowledge, in particular abstract knowledge, legitimizes professional work and enables a profession to sustain its jurisdictions. As the seats of learning and knowledge, universities play important roles in the development of professions. Abbott identifies four roles of higher education in professionalization: legitimizing, advancing new knowledge, training young professionals, and providing an arena for inter-professional competition. Using Abbott’s model focusing on work, and the role of higher education in professionalizing that work, the growth of museum studies graduate programs in higher education serves to further the acceptance of museum work as a profession. In an article in *Exhibitionist*, the journal of the National Association for Museum Exhibition, Dillenburg (2006) draws upon interviews he conducted with museum studies professors and exhibit workers to make the argument that museum studies in higher education has indeed increased professionalism, specifically in the area of museum exhibition. He falls short, however, of claiming that museum studies has led to the emergence of a museum profession.

This review of the literature indicates that the argument against the existence of a museum profession has been active for nearly a century, but the vehemence of that debate has greatly subsided. The term “museum profession” is now widely used by museum workers themselves. Various writers point to traits such as common values, public service, and a unique body of knowledge specific to museum work as supporting evidence (Genoways, 2006). Not surprisingly, those who have argued against the existence of a museum profession, such as Weil (1990 a, 1990b), have been critical of museum studies programs at institutions of higher education. Those who have argued in support of a museum profession now appear to be in the majority and strongly support museum studies training, stipulating that it should be combined with some education in a traditional academic discipline (Genoways and Ireland, 2003; Alexander, 1979; Glaser and Zenetou, 1996; Danilov, 1994).

History of Museum Professional Training in the United States

The increase in the size and number of museums in the late 19th and early 20th century resulted in greater specialization of labor and increased opportunities for work in museums. Most early museum workers were either art enthusiasts or individuals trained for other professions who simply fell into museum work. Some were scientists. Some did not even have degrees. Criteria for filling positions varied widely (Cushman, 1984).

In 1907, the popular magazine, *The Nation*, published an opinion piece lamenting the great shortage of educated American museum workers in the early 20th century. The article explained that in “the new and interesting profession that has been opened up through the growth and creation of art museums, [the] supply of curators falls far short of the demand... We need a supply of trained curators, and need it now, and sorely” (Training for Museum Work, p. 50-51). The article suggested that it might be “easier to find a good director than a competent staff of

curators” (p. 50) arguing that many administrators with executive abilities, trained for other professions, could fill directorial positions. Regarding the training of museum curators, the writer asserted that American art museums were “too new to serve as training schools” (p. 50). The article went on to propose that because of the urgency of the shortage, training schools should be formed in the great art museums of Europe to prepare American curators.

One of the first museum leaders in the United States to publicly address the shortage of trained museum workers was George Browne Goode. As Assistant Secretary of the Smithsonian Institution, he was in charge of the National Museum. In an 1895 paper published as part of the 1897 Annual Report of the United States National Museum, he wrote, “A museum without intelligent, progressive, and well-trained curators is as ineffective as a school without teachers, a library without librarians, or a learned society without a working membership of learned men...intelligence, a liberal education, administrative ability, enthusiasm, and that special endowment which may be called ‘the museum sense’ are all prerequisite qualifications” (Goode, 1897, p. 206). It should be noted that the training that Goode was calling for was in subject matter areas. It was understood at the time that skills specific to museum work would and could be learned on the job (Cushman, 1984). Goode (1897) emphasized, however, the importance of having good museum administrators capable of handling “the business affairs of a museum” (p. 207) leaving curators free to focus on their scholarly work. Goode believed that museum administrators should “be men who comprehend the meaning of museum work and are in sympathy with its highest aims, and that its business affairs and scientific work should be controlled by the executive head” (p. 207).

In the first decade of the 20th century, three programs were begun in the United States for the training of museum workers in response to the growing demand (see Table 1 for a

comparison of early museum training programs in the United States). Each of these sought to produce museum workers who had a balance of museum skills and subject matter knowledge. According to Malt (1987), these early programs were “the products of visionaries—dedicated, often eccentric, men and women with strong commitments to museology. Their programs tended to end when they died or retired, and part of the success of their programs rested on their strong personalities and leadership” (p. 168).

Table 1
Early Museum Training Programs in the United States, 1908-1925

	Pennsylvania Museum	State University of Iowa	Wellesley College	Harvard University	Newark Museum
Date Founded	1908	1908	1910	1921	1925
Founder	Sara Yorke Stevenson	Dr. Homer Dill	Myrtilla Avery	Paul J. Sachs	John Cotton Dana
Background of Founder	Anthropology	Zoology	Library Science, Art History	Finance, Art History	Law, Library Science
Disciplinary Focus	Art, Archaeology	Natural Sciences	Art	Art	General
Curriculum	History and function of museums. Decorative arts, object identification.	Museography. Techniques in exhibition, taxidermy, collections care.	Museum education methods, cataloging collections, care of art objects, museum clerical work.	History and philosophy of museums, museum organization and mgt., buildings, collections care, installation, art restoration, museum ethics.	Apprenticeship program in museum education, exhibition, collections, and administration. Students attended a one hour lecture daily.
Duration	2 years	4 years	Unknown	1 year	1 year
Credential awarded	Certificate (for undergraduates)	Four year degree in disciplinary major, minor in museum science	Unknown	Certificate (for grad. students)	Certificate (for grad. students)
Preparation for museum positions	Curatorial, collections	Curatorial, collections, exhibit preparation, administrative	“Museum assistants”	Curatorial, collections, administrative.	Museum education, collections, exhibit preparation, administrative.

The first program was founded in 1908 by Sara Yorke Stevenson at the Pennsylvania Museum, now the Philadelphia Museum of Art, where she worked as assistant curator (Cushman, 1984). Stevenson was a distinguished Egyptologist, archaeologist and one of the principal founders of the University of Pennsylvania Museum of Archaeology and Anthropology, started in 1887. In 1894, she became the first woman to receive an honorary degree (Doctor of Science) from the University of Pennsylvania, at a time when the university had only awarded six earned degrees to women (Meyerson & Winegrad, 1978).

Stevenson's undergraduate program was administered through the Pennsylvania Museum's School of Industrial Art (Cushman, 1984), now part of a separate institution, The University of the Arts. Stevenson's rather general program combined theory and practice and was geared toward preparing general art museum workers, curatorial assistants and museum curators. Stevenson had expected the founding of the AAM in 1906 to lead to the development of national standards for the training of museum workers (Glaser, 1987). As will be discussed later, for a variety of reasons, such national standards never evolved.

Stevenson's program included critical visits to local museums, practical work in museums, and lectures on the history of museums. By 1910, the program had been extended to two years in length, and its curriculum expanded beyond the history and function of museums to include the decorative arts and object identification (Cushman, 1984). Stevenson appeared before the AAM at its fourth annual meeting in 1909 to appeal for national standards for museum workers and acceptance of the legitimacy of museum training. She stated:

The time is not far off when a standard of museum excellence—passed upon after mature discussion by such a body as this, made up of persons of experience—will be attained, and when the great museums of this century, having settled on this standard, will

undertake the training of assistants along a recognized line of theoretical and practical efficiency, that will open up hopes of promotion as a reward for efficient service; all of which must tend toward the economic advantage and scientific advancement of the work, and toward the higher dignity and material interest of the profession (Stevenson, 1909, p. 119).

Stevenson continued her museum studies program at the Pennsylvania Museum and School of Industrial Art until her death in 1921. E.T. Booth, in *Apprenticeship in the Museum* (1928) discussed the impact of the Pennsylvania Museum program: “It failed, however, to establish any precedent and apparently ceased to exist; yet was the first step in a now much discussed and important movement in the museum world” (p. 5). Indeed when Booth wrote those words in 1928, Stevenson’s vision of national standards for museum training had still not come to fruition and her program, from his perspective, may have been a failed experiment. It would take much more time, but the “important movement” to which Booth referred would eventually take root in the 1970s.

Immediately following the creation of the Pennsylvania Museum program, in 1908, Homer R. Dill, director of the Museum of Natural History at the State University of Iowa (now the University of Iowa), started the first program to train museum professionals for natural history museums (Cushman, 1984). This program still exists today as one of the nation’s few undergraduate museum studies programs (“University of Iowa Museum Studies Program,” 2011). Under Dill’s original program, students received a four-year degree in their major, and a minor in museum science (Cushman, 1984). Museum coursework included freehand drawing and modeling (sculpting) supplemented by laboratory work in the university museum (Dill, 1917). The Iowa program was much more hands-on and technical than the Pennsylvania

program, offering coursework in exhibition techniques and taxidermy (Cushman, 1984).

Museum training was also integrated into other areas of the required undergraduate curriculum. For example, in the required “English work, the theory of museum methods is taken up” (Dill, 1917, p. 45).

In a 1917 address to the AAM, Dill said, “In order to direct, one must know the technical side. It is upon this principle that a training course should be based” (Dill, 1917, pp. 41-42). He went on to say, “We do not expect to revolutionize the museum world. We know that it is not possible to make a museum director of every student who registers for the work. But here and there we begin to see gratifying results” (p. 45). He boasted that a number of graduates of the Iowa program had been hired into responsible positions in large museums including “the State University of Washington, Seattle; Louisiana State Museum, New Orleans; [and the] Royal Ontario Museum, Toronto (p. 45). Dill recognized that a graduate of his program would likely enter museum work in an entry-level position, but the training would “remain of service to him throughout the degrees of his advancement through the various stages leading to directorship” (p. 45). Based on these statements, it is clear that Dill envisioned that some of his graduates would end up as directors, in contrast to the program at the Pennsylvania Museum and School of Industrial Art that was clearly geared toward preparing curators and curatorial assistants (Cushman, 1984, p. 10).

The programs at Pennsylvania and Iowa offered no training in museum administration or education. The former emphasized museum history and art; the second emphasized technical skills in a natural history museum setting. The third museum training program to be established in the United States would be the first to offer formal instruction in museum education directly. Founded in 1910 by Myrtila Avery at Wellesley College, this program was designed to train

women to serve as “museum assistants” (Cushman, 1984, p. 10) at art museums specifically. Besides museum education methods, courses also included cataloging of museum objects, the care of paintings and sculptures, and routine museum clerical work (Cushman, 1984). While the Iowa program appeared to flourish, given Professor Dill’s announcement in 1917 that “we cannot furnish enough graduates to supply the demand for curators and other workers” (Dill, 1917), the Wellesley program had trouble placing its graduates. Cushman (1984) suggests that the differences in success might have been caused by factors such as the perceived value of Iowa’s technical emphasis, the number of jobs at natural history museums versus art museums, or simply the difficulty of placing female graduates in an era that preceded female voting in the United States.

There were, therefore, three museum studies programs in place when the AAM held its fifth annual meeting in 1910, when the controversy over how museum workers should be trained again surfaced. At this meeting, Dr. A.R. Crook of the Illinois State Museum of Natural History presented the results of his survey of 12 natural history museum leaders designed to determine the type of knowledge and skills valued among these men. From his survey, Crook developed a list of 35 questions (see Appendix B) that would be “useful for determining a candidate’s fitness for the position of curator of a museum of natural history” (Crook, 1910, p. 61). The questions illustrate the kinds of qualifications valued by museum leaders at the time, such as a general education, museum skills, knowledge of museum history and philosophy, exhibition techniques, and administrative ability (Glaser, 1993). Questions ranged from the academic, “give [a] full list of your scientific publications” to the technical “discuss items to be considered in case construction” (Crook, 1910, p. 62). Crook commented to delegates that potential museum leaders should not only be able to easily answer these questions, but “should have good health, ability to

handle a horse and canoe, and be inured to the hardships of camp life and the work of exploration” (Crook, 1910, p. 63). Crook quoted one of his survey participants:

Above all, he should be a person of good education—the more the better—genial personality and good address, and of course of unquestioned character. It is also desirable that he be of good family connections, [in order to] please persons of wealth and importance who may visit the museum or be inclined to lend their aid to its development. He must have marked executive ability, a certain amount of diplomacy, and the power of making himself agreeable to the officers and assistants in the institution, so that harmony shall be maintained in the museum corps. I consider this requirement as very important” (Crook, 1910, p. 63).

Crook concluded that the skills and knowledge needed by museum directors were so diverse that no single school could provide them, nor could they be obtained in any one occupation or locality (Crook, 1910). Following discussion of Crook’s findings, according to the meeting proceedings, the general opinion was that while varied training and experience were essential, a successful curator must have “pronounced natural gifts” for museum work (AAM, 1910, p. 64). Frederic A. Lucas, curator at the Brooklyn Institute of Arts and Sciences, forebearer of the Brooklyn Museum (of art), closed the discussion by saying, “I do believe a curator is born and not made. I do not believe you can train a man to be a curator. He is the result of the combination of natural ability and circumstance” (AAM, 1910, p. 64).

Just five years after those in attendance at the 1910 AAM annual meeting seemed to reach consensus that museum workers were “born and not made,” a significant change of opinion on the matter appears to have occurred. At its 1915 meeting, AAM’s membership cited “the scarcity of trained men and women as employees in museum work” (AAM, 1915, pp. 136)

and unanimously adopted a resolution endorsing the new museum studies program focused on natural history at Iowa (AAM, 1915).

The AAM would show continued interest in the issue of museum training, and in 1917 established its Committee on Training for Art Museum Workers. In its first report, the committee classified art museum work into three categories: administrative, curatorial, and educational. The report stated that chief administrative officers should possess knowledge of business methods and strong leadership traits. Curators should have sufficient knowledge of art and a sense of “quality” to qualify them to make purchases for the museum. Educators, the report stated, should have a keen perception of the needs of the community. The committee recognized that education work in museums was so new that “the requirements of the position of instructor have scarcely been standardized” (AAM Committee on Training for Art Museum Workers, 1917, p. 14). The report went on to state that all museum workers should have strong communication skills, including knowledge of foreign languages, and their education should include museum ethics and art history. The report also recommended extensive European travel for all museum staff members which should include opportunities to study objects in their original context through activities such as archaeological field work (AAM Committee on Training for Art Museum Workers, 1917).

Interestingly, the 1917 report of the Committee on Training for Art Museum Workers made no mention of the two museum studies programs in the United States oriented toward art museums at the Pennsylvania Museum and Wellesley College. The report stated that following general academic education in language and art history, students “preparing for the position of curator or director [are] in need of instruction from a specialist in matters related to museum practice and administration, similar to that given at Kaiser Friedrich Museum in Berlin and at the

museum in Nuremburg” (AAM Committee on Training for Art Museum Workers, 1917, p. 15).

The report went on to say that such museum-based training programs would not likely be formed in the United States because “the needs and facilities of the museums [in the United States] and their methods of administration differ so widely that it is a question of whether any museum would wish to assume the responsibility of inaugurating such a course” (AAM Committee on Training for Art Museum Workers, 1917, p. 15). The future formation of partnerships between higher education institutions and museums in the United States was discussed, however, with the report stating that when colleges “come to realize that in [museums] is found a true laboratory for art and history, then much may be done along the suggested lines...towards the establishment in one or more of our museums of a training school offering graduate work to college-trained men and women” (AAM Committee on Training for Art Museum Workers, 1917, p. 15)

In 1919, the committee’s area of interest was expanded to include museums of all types, and it was thus renamed The Committee on Training Museum Workers (AAM, 1919). The committee was chaired by FitzRoy Carrington, Curator of Prints at the Museum of Fine Arts in Boston. After examining the content of existing programs in 1918-1919, the Committee issued a statement that was obviously intended to satisfy both camps in the “born versus made” debate:

A good museum person is ‘born and not made’ and ...no amount of training will fit an individual, who has not the inclination and the temperament, to properly fill a museum position. When we find persons who have the gift, however, we should train them”

(AAM Committee on Training Museum Workers, 1919, p. 87).

The committee went on to say that “museum work should be looked upon as a profession and that the standard of equipment and scholarship demanded of its members should be high” (AAM Committee on Training Museum Workers, 1919, p. 87).

The 1919 report of the AAM Committee on Training Museum Workers was largely based upon the results of a survey sent to 239 museums throughout the United States regarding their programs for training professional museum workers. Because most museum workers at the time were trained in the specifics of museum work through museums and not universities, the committee devoted most of its attention to museum-based programs. Seventy-one institutions responded to the survey. The committee reported that 14 museums had in-house formal training programs providing instruction in museum work. Of these, two were university museums, three were art museums, and one was an archaeology museum. Twenty-four additional museums reported that they felt they possessed the resources necessary to create formal training programs for museum workers. The report also noted that several colleges responded that they were “willing to consider offering a course if there were sufficient demand” (p. 89). All of the museums that were not connected with universities said that they would prefer to enroll students in in-house museum training programs as volunteers. The report does not specify if these “volunteers” would pay to receive such training, but their designation as volunteers makes it clear that they would not be paid. The report also stated that the museums connected with universities preferred that participants in their museum training programs be regularly enrolled university students.

In an effort to provide some guidance to museums and universities developing museum training programs, the AAM Committee on Training Museum Workers (1919) identified four model training programs and provided a brief description of each. Only one of these programs was in the United States, the School for American Research in Santa Fe, New Mexico. The other three programs were schools for American students located in other countries: the American

School of Classical Studies in Athens; the American Academy in Rome; and the American School of Oriental Research in Jerusalem.

The 1919 survey conducted by the AAM Committee on Training Museum Workers also investigated “the outlook for museum workers, including rates of salary, possible openings, and the prevailing tendencies for the future development of the museum field” (p. 90). The Committee found that many museums had vacant positions, but did not expect to fill them during wartime. The Committee predicted, therefore, that:

there will be many positions to be filled after the war, and your committee would suggest that members of the association encourage young men and women of brains and ability to train themselves for these positions, as otherwise when the reconstruction period begins, museums may find themselves handicapped by a lack of efficient helpers (p. 90).

Based on survey results, specific areas of museum work that would be in demand were identified. The areas in most demand were administrative officers, docents, specialists in various branches of the natural sciences, taxidermists, exhibit preparators, and wax workers.

In the 1920s, two of the most famous and influential museum studies programs in the United States were started at Harvard University and the Newark Museum, a museum of art and natural sciences. Both programs greatly shaped the future of museum professional training. Paul J. Sachs started the Harvard Museum Course in 1921 (Cushman, 1984). Sachs, the assistant director of Harvard’s Fogg Art Museum, which was established in 1895, had developed a passion for collecting early in his life. Sachs was born into the wealthy Wall Street brokerage family of Goldman, Sachs. His mother was a Goldman, his father a Sachs (Cohen, 1991). In his 2001 biographical essay, Cohen describes how Sachs had worked unhappily in the brokerage firm for over a decade after 1900, taking long lunch breaks to visit area museums to feed his

passion for art. After serving on committees at Harvard's Fogg Art Museum for a number of years (Cushman, 1984), Sachs accepted an offer in 1914 to become its assistant director (Cohen, 1991).

It was Sachs' concern over the country's artistic health and the lack of qualified curators that led him to start a formal graduate level museum training program in 1921. According to Cohen (1991), Sachs once posed the question, "But how were the men to be found in [sufficient] numbers when the time came when every prosperous self-respecting municipality would wish to boast a museum of its own?" (p. 41). Cohen argues that Sachs was an elitist in the sense that he intended his course for an educated elite that would "lead the general public in matters of artistic appreciation" (Cohen, 1991, p. 41). He hoped to produce what he called "connoisseur-scholars" who would utilize museums as educational tools to reach the public (Cohen, 1991, p. 41).

Sachs' Harvard Museum Course was a one-year curriculum very similar to many modern graduate museum studies programs. Courses included studies in "the history and philosophy of museums, organization and management, buildings, collection, installation, restoration and storage, recordkeeping, museum policies, and museum ethics" (Cushman, 1984, p. 12). Sachs himself concentrated on administrative skills and art appreciation. According to (1991), Sachs wanted to produce graduates who were "promoters, financial wizards, and students of art" (p. 34) like himself. Sach's course included a trip for the students during their winter break to private galleries along the East Coast to view extraordinary private art collections. Sachs knew these collectors personally, and he felt that future curators should know how to build relationships with these people, so that they could successfully negotiate purchases for their own museums (Cohen, 1991). Even more important to Sachs, according to Cohen, was the development of a "'vaunted judgment' for which his students were known" (1991, p. 34). According to Cohen, Sachs wrote

of his course, “It was designed to implant scholarly standards in future museum workers; to educate their eyes so that they might be helped to see” (p. 34).

Sachs took great personal interest in the future of his students as professionals in museums over the next 27 years. He often relayed information to them about jobs and sometimes even accompanied his students to interviews in order to provide a personal recommendation (Cushman, 1984). Many of the influential museum leaders who Sachs brought in as guest lecturers later hired graduates of his Harvard program. According to Cohen, Sachs had the respect of the founders of the Museum of Modern Art in New York, the trustees of the Metropolitan Museum of Art in New York, the Boston Museum of Fine Arts, and many other art museums across the country. On Sachs’ recommendation, one of his graduates, Alfred Barr, Jr. was hired as the first director of the Museum of Modern Art in 1929. As Cohen (1991) says, “Generally speaking, during Sachs’ thirty years as a Harvard professor and museum administrator, his recommendation of a student for a curatorial job was taken as gospel; after his recommendation, no exhaustive search was needed” (Cohen, 1991, p. 35). Sachs taught the museum course himself until his retirement in 1948. From 1921 to 1956, the Harvard museum course instructed 388 students (Cohen, 1991) and many of his graduates became directors and curators in most of the nation’s top museums (Cushman, 1984).

The second influential museum studies program started in the 1920s was John Cotton Dana’s program founded in 1925 at the Newark Museum. This program focused much more on museum education, reflecting Newark’s mission as a community museum. Dana implemented “the new museum idea” (Dana, 1917/1999, p. 24), an innovative concept at the time. Dana suggested a new museum paradigm in which museums abandoned their obsession with “the acquisition of rare and priceless objects with which to fill rows of cold and costly cases [behind]

Greek or Renaissance facades” (1917/1999, p. 25). Instead, Dana said, “the new museum should begin by collecting ideas” (p. 41). Dana was not arguing that museums should not collect objects, but rather that the collection of objects should be driven by how objects can tell the stories of a community. In an era when most museums were inwardly focused, as Stephen Weil (1999) points out in his introduction to the edited volume, *The New Museum: Selected Writings of John Cotton Dana*, “He [Dana] emphasized--long before marketing concepts became current--the importance of connecting program decisions to the needs and interests of the museum’s community” (p. 16).

Dana sought to expand the “new museum” movement through the education of a new generation of museum workers. He envisioned a school to train such museum workers, but failed to garner sufficient financial support. Instead, he created a very successful museum apprentice program (Malt, 1987). In 1928, E.T. Booth, under the direction of John Cotton Dana, compiled a book describing the Newark apprenticeship program. In the introduction, Dana described the need for museum training:

So long as museums felt their duty was done if they gathered objects, identified, preserved, and, occasionally, at hours inconvenient to most busy people, displayed them, they needed only two kinds of help—that of the expert for identification and labeling, and that of the unskilled worker—of the porter and watchman. Workers now should be skillful, by reason of study and observation, in the practice of the arts of explaining, suggesting, stimulating and even, at times, instructing (Dana, 1928, p. 1).

There was no tuition in the Newark apprenticeship program, and the museum paid each student a stipend of \$50 per month for her (for many years, all of the students were women) service to the museum. Dana’s program was much more varied than earlier programs with no

specialization in art or natural history (Malt, 1987). Rather, students received hands-on experience with assignments in the following departments of the Newark Museum: education lending department, five weeks; education junior museum department, five weeks; registrar, five weeks; exhibits, five weeks; science, four weeks; administrative office, two weeks; and public relations, one week. Students attended a class for one hour each day in which department heads from the Newark Museum often served as guest speakers. Students also made field trips to other museums (Booth, 1928). Dana's program lasted for 15 years until 1942 when it was discontinued because of World War II (Malt, 1987). By then, the program had built a solid reputation, and 108 of its graduates had been placed in museums across the United States and Canada (Alexander, 1995).

The museum studies programs at Harvard and Newark covered many of the same topics, but the programs sought to produce different kinds of graduates. As Cushman (1984) points out, "Basically, Sachs at Harvard was training scholars. Dana at Newark was preparing teachers" (p. 15), who would be museum educators. Both programs, however, made a profound mark on the training of museum professionals in the United States, and key characteristics of each program can be seen in the components of many graduate museum studies programs today. The early programs at the Pennsylvania Museum, Iowa, and Wellesley represent the naissance of museum professional training, but it was in the Harvard and Newark programs that the idea matured, and the foundation laid for the great growth in museum studies in the second half of the 20th century.

In 1926, the AAM formally and publicly accepted the need for training museum workers when its Committee on Training Museum Workers actually proposed an AAM-administered national museum training program. The report of the committee stated that such training "is both needed and feasible and that it can be accomplished through the cooperation of our universities

providing the theoretical courses, and our museums providing the practical courses” (Barrett, 1926, p. 53). Through this 1926 committee report, issued a full decade after its first report in 1915, the AAM issued a formal call for the first time for cooperative arrangements between universities and museums and for the establishment of a nationally administered museum training program. The committee called for the theoretical education provided by higher education to include studies in general culture, science, art, and history. The practical education provided by museums through laboratory courses would include museum organization and administration, finance, collections management, exhibit preparation, research, education, publicity, and facilities.

By 1926, the AAM had made preliminary agreements with several museums to offer the recommended laboratory courses. For art and science museum work, a one year course was planned that would include eight week sessions at four or five different museums, a period at the AAM headquarters, and a period in the field. For science museum workers, the committee reported that it was attempting to establish a school of field natural history at Alleghany State Park in New York. The report noted that the development of a program for history museum work required further study. The report recommended that arrangements be made with a university for degrees to be awarded following completion of the practical coursework in museums, and perhaps a thesis and examination (Barrett, 1926). Cushman (1984) describes that despite the amount of planning that seems to have gone into developing this program, it never got off the ground, perhaps because its cost of \$2,500 was high for the 1920s.

Perhaps the most important aspect of the 1926 AAM proposed graduate museum studies program, as Cushman (1984) points out, was the fact that it even existed so many years before museum studies as a course of study became well established. Cushman states that “by proposing

an approved program, AAM members signaled their acceptance of the benefits of museum training and set standards for future programs still viable fifty years later” (p. 16). Following this failed 1926 attempt to create an AAM national museum studies program, the AAM did not address the issue of museum professional training again until 1945, when the Committee on Association Policies recommended that the Association concentrate on the training of museum professionals. Even though the Museums Association in England had instituted a nation-wide museum training program in 1932, the AAM took little action based on the 1926 and 1945 recommendations (Malt, 1987).

Museum Professional Training in the Post World War II Era

While no formal action was taken by the AAM Council on museum professional training during the period between 1945 and the 1970s, the issue occasionally surfaced at AAM meetings and in museum journals. In a 1958 article in *Curator*, Irving Reimann cited the results of his request for statements from respected museum directors on the issue of proper training for museum professionals through university museums. Hugo Rodeck, Stephen de Borhegyi, and Carl Guthe, the directors that he extensively cited, were all noted scholars who had come into museum work through academia, with doctoral degrees in their disciplines. One might expect, especially at this relatively early date, that these museum directors would prefer the more traditional route of entry into the museum profession through content disciplines. On the contrary, each urged the pursuit of academic training in museology combined with disciplinary education.

Reimann first cited Dr. Hugo Rodeck, an entomologist who rose to the position of Director of the University of Colorado Museum, a natural history museum (University of Colorado at Boulder, 2004) who stated that “if museology should turn out to be a legitimate field

of human activity, then I think ultimately museologists will need to be educated in our institutions of higher learning” (Reimann, 1958, p. 64). Rodeck stated that he hoped to set up a one year graduate course in museum studies at the University of Colorado that would “be an entirely academic course. By this I mean that it would not emphasize techniques so much as ideas” (Reimann, 1958, p. 64). While Rodeck felt that the techniques and methods of museum work could be learned in traditional academic disciplines (such as taxidermy training through the biology department), there was a great need for educated thinkers on the purposes and methods of museums, and university museums were appropriate providers for such education (Reimann, 1958).

Reimann (1958) then described how Dr. Stephen de Borhegyi, in his 1957 speech at the AAM annual meeting, urged a closer relationship between universities offering graduate museum studies programs and the AAM. Borhegyi was a highly respected Mesoamerican archaeologist who served as Director of the Milwaukee Public Museum from 1959 until his death in 1969 (Milwaukee Public Museum, 2006). Borhegyi called for the formation of a permanent AAM committee on museum training that would be responsible for accrediting museum training programs and issuing certificates to students completing approved courses of study. He stressed that museum studies programs should offer at least one year of undergraduate study in basic museum skills and one year of required graduate study to include advanced museum methods and administration. Reimann commented on Borhegyi’s optimistic proposal for AAM involvement in museum training, stating that Borhegyi “obviously visualizes a different kind of museum association than now exists in this country” (Reimann, 1958, p. 68).

Finally, Reimann (1958) cited Dr. Carl Guthe, a well-known University of Michigan anthropologist who became director of University Museums at Michigan and later director of the

New York State Museum (University of Michigan Museum of Anthropology, 2009). Guthe observed the “great weaknesses in the museum movement in our country” (Reimann, 1958, p. 68). First, Guthe was troubled that museum workers generally could not “interpret adequately the objectives and functions of museums in our modern society” (Reimann, 1958, p. 68). Second, Guthe expressed concern about the qualifications of museum workers in all but the largest museums to provide proper collections care and management. Like Rodeck, Guthe therefore saw the need for more academic preparation in museum theory, but he also stressed specialized training in museum methods. Recognizing that the size of employing museums dictated the degree of specialization necessary for personnel, and that museum workers in smaller museums would have to be prepared to work in multiple areas, Guthe stressed that museum studies programs be able to provide broad training in all areas of museum work and specialized training in only one museological area (Reimann, 1958, p. 69).

In 1960, Reimann again weighed in on the issue of training for museum personnel emphasizing the dire need for museological training for mid-career museum professionals. As new museum studies programs were beginning to be developed at the graduate level in many colleges and universities, they were mostly geared toward students who had not yet worked in museums. Reimann called for the development of a “crash program, whether it be called seminar, workshop, clinic, or summer institute” (1960, p. 282) for those already working in museums. He suggested that such training programs could include seminars conducted by top leaders in the museum field supplemented by outside lecturers drawn from business and industry (Reimann, 1960).

The United States entered a “museum boom” in the 1950s and 1960s (Glaser, 1987), but it took some time for new graduate museum studies programs to emerge at many colleges and

universities. As Arnold B. Grobman (1956), then director of the Florida State Museum in Gainesville (today called the Florida Museum of Natural History), pointed out, existing museum training programs in the United States were only producing 75 graduates per year in 1956. Grobman argued that this was a ridiculously low number considering that there were approximately 8,000 museum workers in the country at the time. Grobman cited statistics provided by Alice J. Turnham who had conducted a comparative analysis of all museum training programs in the United States in 1956. Turnham (1956) identified 23 programs, including the previously discussed programs at Harvard, Iowa, and Newark, but also a number of very young programs destined to become national leaders in museum training such as the SUNY-Cooperstown Graduate Program, a general museum studies program, and the University of Delaware's Winterthur Program, a more specialized program in American material culture and decorative arts. See Appendix C for a description of each of the museum studies programs identified by Turnham (1956).

In discussing the shortage of trained museum workers, Grobman emphasized the plight of the small museum, which, in spite of representing the largest growth sector and collectively attracting the largest share of visitors, had little chance of attracting trained personnel (Grobman, 1956). Grobman discussed the possibility of creating more museum-based training programs, like that established at the Newark Museum, but he admitted a preference for college-based museum studies programs on campuses with active and effective museums. Grobman stated that such programs would ideally be for post-graduate students, but he recognized that this was unrealistic considering the low salaries in museum work. He compared the salaries to that of public school teachers, suggesting that a comparable number of years of education for museum professionals should be expected. Grobman outlined his suggested curriculum for an

undergraduate major in museum studies in which courses would include: “the museum in America, the school and the museum, planning and designing museum exhibits, modern techniques in the construction of museum exhibits, and registration and cataloging” (Grobman, 1956, p. 21-22).

The decades following Turnham’s 1956 analysis of museum training programs saw great growth in some of the programs she identified, and a proliferation of new graduate museum studies programs in colleges and universities. Glaser (1987) suggests that the growth of museum studies courses and programs in the 1970s was caused first by declining enrollments at some universities and efforts to attract new students to niche programs, and second, by the realization of faculty and students that the museum field provided an alternative career path for sometimes hard to place graduates in the arts and humanities. These same circumstances led to the creation of public history programs in history departments (Glaser, 1987), and today, according to the National Council on Public History, there are 92 graduate public history programs in the United States (2012).

Malt (1987) relates the growth in graduate museum studies programs in the 1970s to the increased importance of museums in the United States in the modern era. Malt cites a variety of factors including: governmental assistance from the National Endowment for the Arts and the Institute of Museum Services (the popularity of blockbuster exhibitions like *Tutankhamen*, the strengthening of the AAM as a professional voice, and the increased importance of museums as a resource for schools (Malt, 1987).

Today, the Smithsonian Institution’s Center for Education and Museum Studies (2010) keeps a directory of museum studies training programs. At latest count, there were 54 graduate programs in the United States that identify themselves as “museum studies,” offering either a

formal post baccalaureate degree or certificate. Some of these programs offer a masters degree in museum studies. Others offer a museum studies certificate for graduate students majoring in traditional museum-related academic disciplines. There is great diversity in the focus of these programs. Some specialize in preparing graduates for work in specific types of museums. Others emphasize a particular type of museum work such as museum education, or administration. See Table 2 for a full listing of current museum studies graduate programs in the United States.

The Integrated Postsecondary Education Data System (IPEDS) of the United States Department of Education's National Center for Education Statistics (NCES) reports completions by major at colleges and universities in the United States. While the Smithsonian Institution's Center for Education and Museum Studies reports 54 graduate museum studies programs, only 32 institutions are reported by IPEDS as having completions of graduate degrees or certificates in the category of museum studies/museology in 2010 (see Table 3) (NCES, 2011). Many of the programs listed by the Smithsonian Center for Education and Museum Studies (2010) do not appear in the IPEDS report under the category of museum studies/museology. Upon closer examination, it is clear that only those programs that are purely labeled museum studies or museology are reported in this category. Because of the diversity in format, curricular focus, and connections with discipline based academic departments discussed earlier, many graduate museum studies programs are spread across a variety of other categories. Some of these programs fall within arts administration or public history while others are connected to a particular academic discipline, such as museum anthropology.

Table 2

Higher Education Institutions with Graduate Museum Studies Programs in the United States

State	Institution	Institutional Control		Graduate Credential(s) Offered	
		Public	Private	Degree	Certificate
Arizona	Arizona State University	X		X	X
California	California State University, Fullerton	X			X
California	John F. Kennedy University		X	X	X
California	San Francisco State University	X		X	
Colorado	University of Colorado	X		X	X
Colorado	University of Denver		X		X
Delaware	University of Delaware	X			X
D.C.	Corcoran College of Art and Design		X	X	
D.C.	Johns Hopkins University		X	X	
D.C.	George Washington University		X	X	X
D.C.	Georgetown University		X	X	
Florida	Florida International University	X			X
Florida	Florida State University	X			X
Florida	University of Florida	X		X	
Florida	University of South Florida	X			X
Georgia	University of West Georgia	X			X
Illinois	Eastern Illinois University	X			X
Illinois	Northern Illinois University	X			X
Illinois	Northwestern University		X		X
Illinois	University of Illinois at Chicago	X		X	
Illinois	Western Illinois University	X		X	X
Indiana	Indiana Univ.-Purdue Univ. Indianapolis	X		X	X
Kansas	University of Kansas	X		X	
Louisiana	Southern University at New Orleans	X		X	
Maryland	Morgan State University	X		X	
Mass.	Boston University		X		X
Mass.	Harvard Extension School		X	X	
Mass.	Tufts University		X		X
Michigan	Michigan State University	X			X
Michigan	University of Michigan	X			X
Missouri	University of Missouri-St. Louis	X			X
New Jersey	Seton Hall University		X	X	
New York	Bank Street College of Education		X		X
New York	Columbia University		X	X	
New York	Buffalo State College-SUNY	X		X	
New York	Cooperstown Grad. Prg.-SUNY at Oneonta	X		X	
New York	New York University		X	X	X
New York	Syracuse University		X	X	
Ohio	Case Western Reserve University		X	X	
Ohio	University of Cincinnati	X			X
Oklahoma	University of Central Oklahoma	X			X
Oklahoma	University of Tulsa		X	X	X
Oregon	University of Oregon	X			X
Penn.	University of the Arts		X	X	
R.I.	Brown University		X	X	
S.C.	University of South Carolina	X			X
Tennessee	Middle Tennessee State University	X			X
Tennessee	University of Memphis	X			X
Texas	Baylor University		X	X	
Texas	Texas Tech University	X		X	
Texas	University of Texas at Austin	X			X
Virginia	Virginia Commonwealth University	X		X	
Washington	University of Washington	X		X	
Wisconsin	University of Wisconsin-Milwaukee	X			X

Note: Data gathered from the Smithsonian Institution Center for Education and Museum Studies (2011) and program's websites.

Table 3

Completions of Graduate Degrees or Certificates in Museum Studies/Museology 2004-2010

Institution Name	2004	2005	2006	2007	2008	2009	2010
Baylor University	5	5	6	6	7	8	9
Brigham Young University	0	0	1	1	1	1	0
Boston University	0	0	0	0	0	1	0
Brown University	0	0	2	8	17	0	0
Cleveland State University	0	0	0	0	0	0	1
Corcoran College of Art & Design	0	0	0	0	0	0	6
Fashion Institute of Technology	12	2	12	3	3	7	8
George Washington University	42	34	60	55	61	75	43
Georgetown University	0	0	0	0	8	10	11
Harvard University	11	14	21	1	2	0	0
Indiana Univ. Purdue Univ.- Indianapolis	0	0	1	4	20	19	11
John F Kennedy University	10	10	20	27	16	9	15
Johns Hopkins University	0	0	0	0	0	0	9
Morgan State University	0	0	0	0	0	0	2
San Francisco Art Institute	0	0	0	0	6	6	2
San Francisco State University	13	21	31	13	24	24	27
Seton Hall University	16	13	17	20	16	18	14
Southern Illinois Univ.-Edwardsville	2	4	2	3	2	3	8
Southern University New Orleans	0	4	0	3	5	7	9
SUNY College at Buffalo	0	0	0	0	0	3	0
SUNY College at Oneonta (Cooperstown)	22	20	25	21	20	14	13
Texas Tech University	16	14	12	14	19	9	10
The University of the Arts	7	13	16	16	14	13	18
Tufts University	4	3	6	1	4	6	4
University at Buffalo	0	0	0	0	0	1	2
University of Cincinnati	11	12	12	0	0	9	13
University of Colorado-Boulder	5	11	11	4	8	6	11
University of Florida	3	4	4	7	8	4	2
University of Kansas	15	6	13	10	12	11	11
Univ. of Maryland-College Park	1	0	0	1	1	2	4
University of Memphis	0	1	2	5	1	4	8
University of Michigan-Ann Arbor	0	4	5	4	7	12	7
University of Missouri-St. Louis	0	0	0	0	0	0	11
University of Nebraska-Lincoln	14	8	5	0	0	0	0
University of Oregon	0	3	1	1	3	5	4
Univ. of South Carolina	5	13	5	4	6	4	6
University of Washington-Seattle	12	6	11	14	22	29	28
University of West Georgia	0	0	0	0	0	7	8
TOTALS	226	225	301	246	313	326	335

Note: Source of Data is IPEDS, National Center for Education Statistics (2011).

The old debate over the existence of a museum profession still arises in discussions over the best route to enter museum work. It often comes up in informal conversations at museum professional associations, and frequently on Museum-L, the national museum list-serve run by John Chadwick of the New Mexico State Library. Most agree that some form of academic preparation is necessary, but some still favor graduate degrees in traditional disciplines. The preceding discussion of the history of the development of museum studies in the United States shows a gradual acceptance of academic training in the skills, knowledge, philosophy, and ethics specific to museum work. This acceptance of museum studies has been made possible by the gradual historical acceptance of museum work as a profession. As Glaser (1987) points out, “Skepticism about museum studies as one route into the museum field was once the norm, but has now virtually disappeared” (p. 273). Sharon Macdonald (2006) reiterates, “Museum studies has come of age. Over the past decade in particular, the number of books, journals, courses and events dedicated to museum studies has grown enormously. It has moved from being an unusual and minority subject into the mainstream” (p. 1). For the last 20 years, museum studies education has been clearly accepted as a legitimate route for entering the museum profession.

The Development of Modern Standards and Recommendations for Museum Studies Curricula

Curricula in most graduate museum studies programs in the United States have been influenced by multiple sources, including documents produced by AAM, the Canadian Museums Association, and the International Council of Museums (Fuller, 2005). As described in the previous section, the AAM repeatedly addressed the issue of training for museum work in the first half of the 20th century, and even attempted to develop a nationally administered museum studies program in 1926 (Barrett, 1926). The AAM again directed attention to the need for

trained museum workers in 1945, but mostly ignored the issue until the 1970s (Malt, 1987). At this time, the International Committee for Professional Training of the International Council of Museums (ICOM) also published a suggested course of study for museum training in *Professional Training of Museum Personnel in the World* (1972).

The 1972 ICOM report recognized that the concept of museology as a field of study was not yet generally accepted, but stressed that it should be treated as “a science, an art and a craft, which can be related to a dozen or more different disciplines, and which can be treated at [the] university level as well as technical level” (p. 6). The ICOM report included a suggested syllabus intended as a “global programme for both a theoretical and practical training” (p. 7) in museology and museography that could be adapted to instruction at various college levels regardless of disciplinary focus. The ICOM committee recommended that a course of study in museum work should be accompanied by academic preparation in museum related core disciplines. The committee also strongly stressed that museological training should include applied practical work in a museum or laboratory throughout the curriculum, to be followed by one or several months of a closely supervised internship (ICOM, 1972).

The 1972 ICOM report made a distinction between training in museology and museography. With more emphasis on theory, science, and systems, the report called for training in museology at the college level to culminate “in a university degree in museology, with a mention of the specialization” (p. 8). Vocational training in museography should result in a “technical diploma in museography” (p. 8).

The suggested curriculum for museum professional training developed by ICOM (1972) included nine sections (see Appendix D for the complete detailed course of study):

1. Introduction to museology
2. Organization, operation and management of museums
3. Architecture, layout, equipment
4. Collections: origins, documentation (relevant data), placing, moving
5. Scientific activities; research
6. Care and treatment of collections
7. Presentation; exhibition
8. The public
9. Cultural and educational activities of the museum

By the 1970s, some museum leaders were concerned that graduate programs in museum studies were being established “in unexpected and alarming numbers” (Glaser, 1987, p. 269). AAM responded by forming a series of committees to suggest model curricula. By 1983, AAM began investigating the possibility of accrediting museum studies graduate programs. In addition, the Metropolitan Museum of Art hosted a national conference in 1971 to discuss issues of museum training (Glaser, 1987).

In 1973, the AAM formed its Museum Studies Curriculum Committee, which published *Museum Studies: A Curriculum Guide for Universities and Museums* (1973) to make curricular suggestions for undergraduate and graduate programs in museum studies. According to Glaser (1987), the 33 page report received little attention from higher education institutions. Nonetheless, the guide laid the groundwork for future reports.

The 1973 curriculum guide argued that “with museum staffs potentially so complex and with museum functions so varied, a comprehensive course in museum work becomes highly desirable for anyone entering the profession” (AAM Museum Studies Curriculum Committee,

1973, p. 9). Perhaps revealing one possible reason that the guide was largely ignored by higher education institutions was its recommendation that museum studies courses be taught by museum professionals. This recommendation complicates the formation of museum studies programs in universities that do not have a campus museum with museum professionals who are qualified and willing to teach. The report also recommended the use of specialists as guest speakers, visits to many museums, and student writing on real-life museum issues. Like the 1972 ICOM report, the 1973 AAM report stressed the importance of practical museum work in the curriculum and closely supervised internships that would engage students in useful projects. The guide also stressed the importance of museum studies training for those who work in small museums with one or two professionals, as their jobs would often require them to perform a variety of museum functions (AAM Museum Studies Curriculum Committee, 1973).

The 1973 curriculum guide recommended a course of study that includes “museum history, purposes, administration, collection, conservation, research, exhibition, interpretation, and professional ethics and organization in considerable detail” (AAM Museum Studies Curriculum Committee, p. 9). The report concluded with 7 basic recommendations for graduate museum studies programs:

1. The museum studies program should be a graduate program taught in concert by an accredited university and by one or more accredited museums. The university should be accredited by its regular regional accrediting authority, the museum (or museums) by the American Association of Museums.
2. The subject-matter courses in American studies, anthropology, art, art history, botany, folk life studies, geology, history, physical science, or some other academic discipline may be included in the museum studies program.

3. The program should include at least one course that provides students with the knowledge of how to use museum objects to impart understanding of one or more subject matter fields.
4. The program should include one course that constitutes an introduction to the museum field and examines the history and philosophy, principal functions, and representative kinds of museums.
5. Another required course should touch cogently upon all aspects of museum work— history, purposes, management, collection, registration, conservation, research, exhibition, interpretation, and professional ethics and organization.
6. The program should provide internship experience in one or more accredited museums for a period of at least two months and up to one year.
7. As a guide to the topics that should be covered by the course or courses dealing with museum management and function, described in point 5 above, the Curriculum Committee recommends the use of ‘Museum Studies: A Suggested Syllabus,’ ... as a checklist (See Table 4) (AAM Museum Studies Curriculum Committee, 1973, pp. 16-20)

Table 4
Summary of “Museum Studies: A Suggested Syllabus” (1973)

Curriculum Category	Components
Introduction to museum studies	History and purpose of museums, general notions of museology and museography, types of museums, changing nature of museums, museum law, cooperative ties between museums.
Organization, operation, and management of museums	Legal status, governance, organizational structure, management problems, budget, personnel, maintenance, security, public relations, performance evaluation.
Architecture, layout, equipment	History of museum buildings, museum design and construction, circulation patterns, layout and furnishings.
Collections: Origin and acquisition	Private collectors (motives), general principles of museum collection, modes of acquisition, special problems (restricted vs. unrestricted acquisitions, forgeries, lending, disposal or deaccession).
Data and documents related to collections	Accessioning objects and specimens, identification, cataloguing, reference files, tracking displaced collections, documentation (audiovisual techniques), the museum library.
Scientific and research activities	Fundamental research for internal goals (examination of objects, research for exhibition and public programs, museum audience research); research for the scholarly community; organization of research; museum reports and publications.
Preservation and care of collections	General principles: active and passive preservation; physical, chemical, and biological factors; technical and scientific laboratories: examination and treatment of objects; rehabilitation and repair, main principles for maintenance of collections; inspection records; data on object treatment.
Presentation: Exhibitions	General theory of communication and principles of display, functional or ecological exhibition vs. systematic exhibition, exhibit development (story/script, object selection, design of space, audience, equipment), types of exhibitions, exhibition problems of interpretation and presentation (roles of curator and designer, labels and graphics, multimedia aids, visitor circulation, publicity and evaluation).
The public	General principles of the museum as a public facility, visitor behavior, visitor services, various facilities for public use (sales/information counter, auditorium, theaters, etc.), visitor statistics.
Cultural and educational activities of museums	Public relations; lectures, seminars, tours, and special events; youth and adult programs; museum extension programs.

Note. From *Museum Studies: A Curriculum Guide for Universities and Museums* (AAM Museum Studies Curriculum Committee, 1973)

According to Glaser (1987), three years following the release of the 1973 Museum Studies Curriculum Guide, many colleges and museums finally expressed concern over the rapid

uncontrolled proliferation of graduate museum studies programs. By 1976, the AAM had responded with a study and the Smithsonian's Office of Museum Programs and the National Museum Act Program of 1976-1977 (a Smithsonian administered grant program funded by the National Museum Act, first passed in 1966) jointly sponsored a national Conference on Museum Training. Based on the recommendations from these initiatives, in 1976 AAM President Joseph Veach Noble appointed a new Museum Studies Committee to analyze the curriculum of graduate museum studies programs and assess their relevance to the professional needs of modern museums. The committee was also charged with recommending minimum standards for graduate museum studies programs (Glaser, 1987). The AAM Museum Studies Committee of 1976-1978 consisted of 16 members (see Appendix E) from across the United States selected to ensure diversity by size, type of institution (public, private not-for-profit, and higher education), by museum functions (curatorial, education, administrative), and by disciplines (history, art, science, anthropology, and technology) (Glaser, 1978).

Between 1976 and 1978, the AAM's Museum Studies Committee, chaired by Jane Glaser, Program Manager of the Office of Museum Programs, Smithsonian Institution, met five times and employed a part time staff member to coordinate committee activities and compile information. The work of the committee culminated in the release of two reports, *Statement on Preparation for Professional Museum Careers*, and *Minimum Standards for Professional Museum Training Programs*, both of which were formally accepted by the AAM Council in May 1978 and were widely disseminated through publication in AAM's magazine *Museum News* in November of that year (Glaser, 1978). The first committee report, *Statement on Preparation for Professional Museum Careers* noted that the previous decade had seen a rapid growth in museum training programs spurred by the publication of two nationally significant reports and

new streams of funding. *America's Museums: The Belmont Report* (Robbins, 1969) by the AAM, and *The Visual Arts in Higher Education* (Ritchie, 1966) by the College Art Association both lamented the shortage of trained museum personnel. As *The Belmont Report* pointed out, "If the staffing needs of museums are to be met, a very substantial expansion of training programs will be essential, as well as an expansion of the present limited number of fellowships" (Robbins, 1969, p. 30). These reports were followed by new funding for museum training from private foundations such as the Ford and Rockefeller foundations, and government agencies such as the National Endowment for the Arts, National Endowment for the Humanities, National Science Foundation, and the National Museum Act intended to "nourish the development of museum training" (AAM Museum Studies Committee, 1978b). The committee noted that these reports and funding resulted in "the emergence of a multitude of programs differing widely in character, intent and quality, and having in common almost nothing but the blanket designation 'museum training'" (AAM Museum Studies Committee, 1978b).

The 1978 *Statement on Preparation for Professional Museum Careers* called for minimum requirements to be established for training at the graduate level, mid-professional level, and for independent internships. While strongly encouraging museum training through higher education, the statement recognized the continued appropriateness of the traditional route of entering the museum profession through academic training in a museum related academic discipline, but noted that people following this route "would have had no formal instruction in the theory and practice of museum work" (p. 21) and that they would benefit from "an intensive internship, apprenticeship, or work experience" (p. 21).

The AAM Museum Studies Committee's second report of 1978, *Minimum Standards for Professional Museum Training Programs*, provided minimum requirements for training at the

graduate level, mid-professional level, and for independent internships. Like the 1973 *Museum Studies: A Curriculum Guide for Universities and Museums*, the 1978 standards called for programs to be taught at the graduate level in accredited colleges and universities in cooperation with accredited museums. Participation in courses by undergraduate students was encouraged, but only with the intent of introducing them to museum work and the possibility of pursuing graduate museum studies, not as preparation for museum careers. The 1978 standards clarified that degrees could be awarded “in the academic subject or in museum studies, depending on the emphasis of the program” (AAM Museum Studies Committee, 1978a). At the very minimum, the standards called for graduate museum studies programs to include at least six semester hours of instruction in the history of museums, theory, and practice and stressed that program faculty should possess substantial practical experience working in museums and appropriate academic degrees.

Regarding curriculum, the 1978 *Minimum Standards for Professional Museum Studies Programs* stated that all museum studies graduate programs should include the following topics:

1. History, philosophy and purposes of museums.
2. Professional ethics and public accountability.
3. Management of collections including acquisition, conservation, and documentation.
4. Utilization of museum objects in scholarly research, in education and interpretation, and as sources of esthetic experience.
5. Exhibition planning, design and installation.
6. Evaluation of the visitor experience in the museum environment.
7. Administration of finances, personnel, public relations and physical facilities; trustee-staff relations, legal aspects and development (p. 23).

The 1978 standards also stated that completion of such programs should require at least two academic years and they should include a formal supervised internship or full-time on-the job experience.

Further emphasizing the importance of practical experience, the 1978 *Minimum Standards for Professional Museum Studies Programs* devoted an entire section to spelling out minimum standards for internships. The standards made a distinction between internships independent of museum studies programs (intended for those with graduate degrees in academic disciplines) and internships for graduate students in museum studies programs indicating that the former should last a minimum of 12 months and the latter a minimum of 6 months. The standards specified that both classifications of internships should incorporate the following principles:

1. The internship should represent full-time employment of the intern's energies (40 hours per week or whatever the supervising museum defines as its standard work week).
2. Interns should be integrated into the ongoing work or programs of the museum and treated as staff members.
3. Interns should assume professional-level responsibilities and be expected to complete a project or some discrete portion of a major project.
4. Interns should have a formal written agreement with the sponsoring museum specifically stating their duties and outlining the desired objectives of the internship. The document should be reviewed halfway through the internship and amended as needed.

5. Interns should be carefully supervised by experienced and responsible professional staff members.
6. A museum considering the establishment of professional-level internships should recognize that supervisory requirements will absorb significant quantities of experienced staff time. Few museums define their primary purpose as training interns. A meaningful allocation of personnel resources could diminish a museum's capacity to fulfill its basic purpose. To compensate for this loss, internships must be designed to benefit equally and mutually both the sponsoring museum and the interns.
7. The sponsoring museum should design the internship to insure that the intern will become acquainted with all functions, programs, and departments of the museum, and will understand the relationship of the intern's specific work to that of the museum as a whole and to the museum field in general.
8. At the conclusion of an internship, reports should be prepared separately by both the intern and the supervisor, carefully documenting the intern's actual work experience and critically evaluating it with reference to the criteria set forth in these guidelines (AAM Museum Studies Committee, 1978a).

In 1980, The AAM Museum Studies Committee, still chaired by Glaser, issued a follow-up to its 1978 reports entitled *Museum Studies: A Second Report*. Like the earlier reports, it was widely disseminated to the profession in *Museum News* (AAM Museum Studies Committee, 1980). This report added suggested qualifications for 12 common museum positions, the results of a survey of hiring practices in museums, a survey of museum study programs, and a list of suggested questions for students considering graduate museum studies programs. One intention of the suggested qualifications, according to the report, was to assist new or existing graduate

museum studies programs in developing or refining their curricula. For each position, suggested minimum requirements for level and area of education; experience; and knowledge, abilities and skills are listed. For the purpose of this study, the suggested minimum requirements for level and area of education are listed in Table 5.

Table 5
Minimum Education Requirements for Common Museum Positions Recommended by the AAM Museum Studies Committee (1980).

Museum Position	Minimum Educational Requirements
Director	Advanced degree in an area of museum's specialization. Coursework and participation in museum admin./mgt. desirable.
Business Manager	Degree in business or public administration.
Curator	Advanced degree with a concentration in a discipline related to an area of the museum's specialization.
Educator	None provided. Only knowledge, skills and abilities are listed.
Public Relations Officer	Degree in public relations, journalism or communications.
Development Officer	Degree in business, arts admin., P.R., marketing and/or advertising.
Museum Librarian	Advance degree in library science. Additional coursework in the area of the museum's specialization is desirable.
Membership Officer	Degree in business, P.R., marketing, public administration or liberal arts.
Bldg. and Grounds Superintendent	High school diploma and appropriate certified technical training in physical plant management.
Collections Manager	Degree in the area of the museum's specialization. A graduate degree in museum studies with a concentration in a discipline may be desirable.
Editor	Degree in English or journalism. Some coursework in the area of the museum's specialization is desirable.
Photographer	High school diploma and certified technical training in photography with an emphasis on studio photography.

Note: From *Museum Studies: A Second Report*. (AAM Museum Studies Committee, 1980).

Despite the attention that the AAM Museum Studies Committee gave in its 1978 and 1980 reports to the appropriateness of graduate work in museum studies as a valid route for entry

to the museum profession, it should be noted that the 1980 suggested minimum qualifications seem to emphasize professional degrees in more specialized areas or in the discipline of the museum's area of specialization. The 1980 report states that "some committee members felt that most, if not all, positions should require formal course work in an area of the museum's specialization" (AAM Museum Studies Committee, 1980, pp. 27-28). Because the committee made it very clear that museum studies should be taught at the graduate level (AAM Museum Studies Committee, 1978a; 1978b; 1980), it could be surmised that the committee endorsed completion of an undergraduate or graduate degree in an area of museum specialization (art, history, anthropology, etc.) and/or in a professional area (public relations, education, or business) followed by a graduate degree or certificate in museum studies. The committee also may have been trying to appease multiple camps in the continuing debate over the appropriateness of museum studies, or that the field is so complex that it requires professionals with broad academic preparation.

The 1980 report of the AAM Museum Studies Committee also included a summary of the results of a survey of museums or institution of higher education in the United States that offered at least one museum studies course or internship. According to the report, "the purpose of this survey was to collect information on degree requirements, course work, museum affiliation, faculty qualifications and the duration and range of internship experiences (AAM Museum Studies Committee, 1980, p. 33). Based on the survey results, the committee concluded that too many graduate museum studies programs were not connected to an available museum, and courses were often taught by people with little or no practical museum experience (Glaser, 1987).

Overall, the AAM Museum Studies Committee, chaired by Glaser, was not pleased with the usefulness of the results of its 1980 national survey, noting that some answers were incomplete or reflected a misinterpretation of the questions. In addition, the survey was hindered by the ambiguity of terms and concepts such as “programs” and “museum studies.” As a result, the committee “decided that further statistical analysis of this survey would be inconclusive” (p. 33). Furthermore, the committee recommended that a more thorough study of museum studies training opportunities be conducted and that “such a study should include the establishment of precise definitions, on-site visits and documentation of the study’s findings” (p. 33). Despite these recommendations, the AAM Museum Studies Committee did not undertake a more detailed study.

While the 1980 AAM survey conducted by the museum studies committee did not provide much useful information, it provided some data on the types of museum training offered by responding institutions. Of the 242 institutions that were sent questionnaires, 126 (58%) responded. Forty-two respondents described their museum studies training as being integrated into advanced degree programs in academic disciplines. Thirty-four institutions responded that their museum studies training was taught in concert with accredited museums leading to advanced degrees in a discipline. Only five respondents offered advanced degrees in museum studies (AAM Museum Studies Committee, 1980).

The activities of the AAM Museum Studies Committee between 1973 and 1983 resulted in suggested curriculum and minimum standards for graduate museum studies programs, but there was no mechanism in place to compel programs to follow these guidelines. The AAM had been accrediting museums through a highly successful and respected process since 1971, but this program did not include reviews of academic graduate museum studies programs (Glaser, 1987).

In 1981, Craig Black, AAM's president, asked the AAM Professional Practices Committee to examine the feasibility of creating an accreditation program for graduate museum studies programs. A subcommittee was formed, chaired by Barbara H. Butler of the University of Delaware museum studies program. After discussion of the complexities of developing such a program, the group decided that a full feasibility study was probably not economically feasible at the time, and would be "too large an undertaking for this ephemeral subcommittee" (AAM Professional Practices Committee, 1983, p. 70). Recognizing the great need for guidelines for the development and evaluation of graduate museum studies programs, the committee instead prepared a program self-study outline, which, it suggested, could "ultimately be a part of an accreditation plan" (AAM Professional Practices Committee, 1983, p. 70).

The subcommittee self-study outline, *Criteria for Examining Professional Museum Studies Programs* was adopted by the AAM Council in January 1983 and published in *Museum News* in June of 1983 with the intent of providing "approved guidelines while permitting flexibility for individual programs" (AAM Professional Practices Committee, 1983, p. 70). The subcommittee recognized that the rapid growth of graduate museum studies programs in the United States had resulted in wide variance of degrees offered, focus and scope of programs, and relationships with academic disciplines. Rather than lamenting this diversity as the 1978 AAM Museum Studies Committee had done (AAM Museum Studies Committee, 1978b), the subcommittee of the Professional Practices Committee expressed that "museum professionals agree that [such] diversity is desirable" (AAM Professional Practices Committee, 1983, p. 70).

The self-study outline, or guide, *Criteria for Examining Professional Museum Studies Programs* (1983) includes sections on program goals and objectives, curriculum, faculty, students, governance, administration, financial support, physical resources and facilities, and

placement. The guide called for each program to develop a statement of purpose that should include:

the philosophical stance that serves as a guide for planning and a frame of reference for evaluation; a description of the status of the program at the university; a description of the kind of credential offered and the relationship between academic specialties and museology; identification of the museum positions for which students will be prepared; and objectives appropriate to the instructional purposes, including a means of continuous evaluation of the program (AAM Professional Practices Committee, 1983, p. 71).

In addition, the guide stated that program goals and objectives should reflect standards for museum practice established in policy statements of the AAM.

In the curriculum section, the guide called for curricula to be developed that “should combine the study of an academic specialty with the study of museology and museography, acknowledge the diversity among museums and recognize uniformly high methodological and theoretical standards” (AAM Professional Practices Committee, 1983, p. 71). According to the guide, the curriculum should include:

the historical, contemporary, and future nature and role of museums in society; the governance and management of museums; ethical and legal aspects of museum operations; planned growth and management of museum collections; preservation, presentation, and interpretation of collections; maintenance of physical facilities; the conduct of education and outreach programs; and evaluation of museum programs. It should provide a balance between the intellectual and the pragmatic, have a boldness of scope together with intensive emphases and meet the needs of students considering

employment in various types and sizes of museums, positions, and geographic regions.
(AAM Professional Practices Committee, 1983, p. 70).

Besides formal instruction, the self-study outline called for curriculum that includes opportunities for student research and practical experience. It stressed a theoretical foundation that could be applied through the use of case studies and practical museum-based projects. Regarding evaluation of museums studies curriculum, the outline called for a review of evidence including catalog descriptions; minutes of curriculum committee meetings; student program guides; course syllabi; course and program evaluations by students, auditors and museum professionals; and student theses, research papers, and projects (AAM Professional Practices Committee, 1983).

Regarding faculty, the self-study outline called for graduate museum studies programs to have faculty “experienced in professional museum practices and representative of the academic disciplines appropriate to its scope” (AAM Professional Practices Committee, 1983, p. 100). The outline also stressed the importance of faculty research for the enrichment of teaching and the expansion of museological knowledge. While the guide calls for the bulk of teaching and research in a museum studies program to be conducted by full-time graduate faculty, it emphasizes the desirability of part-time faculty drawn from allied museums to complement the specialties of the full-time faculty and provide students with the opportunity for direct contact with museums. Besides having substantial museum experience, the guide calls for faculty to have:

advanced degrees or other appropriate credentials from a variety of academic institutions;
mastery of subjects included in the program’s curriculum; a substantial record of
scholarship; an aptitude for educational planning, administration, and evaluation; and a

close and continuing participation in the museum profession (AAM Professional Practices Committee, 1983, p. 100).

In addition, the guide stressed that faculty workloads should be structured to ensure quality instruction and permit time for research and professional activities.

The student section of the self-study outline called for programs to “attract students of the highest quality and commitment to the field” (AAM Professional Practices Committee, 1983, p. 100). The guide stipulated that prospective students should normally hold a bachelor’s degree in a discipline relevant to museum work, with some justifiable exceptions. Thus by 1983, the AAM officially recognized that an undergraduate degree was the minimum level of education necessary to undertake academic training in museum studies. The outline also called for students to be provided with opportunities for guidance and counseling and given regular assessments of their progress and performance. Students should also be commonly introduced to members of the museum profession.

In the section on governance, administration, and financial support, the program self-study outline states that “a museum studies program should be a distinct academic unit within the university. It should have the same independence from the university and from professional associations or advisory bodies as other academic units” (AAM Professional Practices Committee, 1983, p. 102). The guide stressed the importance of programs having the freedom to control their curriculum and the selection of faculty and students. The guide also stated that it was the responsibility of the program chair or director to develop formal relationships between the program and the university museum, or local museums, to ensure opportunities for practical experiences for students. The guide also listed necessary physical resources and facilities for a

museum studies program including a library of museological literature, technological resources, faculty offices, classroom and laboratory space.

Finally, the 1983 self-study outline called for graduate museum studies programs to develop procedures and resources to foster the placement of graduates in museum positions. Resources should include professional career counseling and position referral services. In addition, programs should conduct periodic appraisals of placement success through alumni surveys (AAM Professional Practices Committee, 1983).

Regarding the attempts to initiate a national accreditation program for museum studies graduate programs in the 1970s and 1980s, Glaser (1987) wrote that colleges and universities had initially resisted efforts to create national standards in the 1970s, but the resistance had greatly declined by the early 1980s. In the end, the AAM decided not to implement a formal accreditation program for museum studies, not because of resistance from higher education, but because, as Glaser (1987) suggests, it was not economically feasible because of lack of funding for implementation.

The 1978 and 1983 AAM documents on museum studies in part contributed to great improvements in graduate programs in the United States. As Glaser (1987) points out, some programs were eliminated in the 1980s because of lack of university support or lack of funding, but other programs improved greatly. The rapid growth of graduate museum studies programs in the 1960s and 1970s tapered off in the 1980s, a statistic that Glaser in 1987 suggested indicates stabilization.

Today, the AAM Committee on Museum Professional Training (COMPT), an AAM standing committee since 1990, includes on its website a *Standards and Best Practices Guidelines* document, issued in 2004 (Phyllis Hecht, personal communication, 2012), intended

to assist member graduate museum studies programs in establishing “appropriate content, teaching methodologies, measures for outcomes and assessment” (AAM COMPT, 2004, p. 1).

The guidelines include sections on program goals, program content, program instructors and instructional approaches, and program responsibilities. Regarding curriculum, the section on program content includes the following items:

1. Transmission of both theoretical and practical in-depth knowledge of museums, an understanding of the role of museums, knowledge of best museum professional practices, and the creation of lifelong learning goals.
2. Curriculum that reflects and responds to current and emergent needs in museums and their communities, including the challenges of new technologies.
3. Rigorous standards of scholarship that emphasize the importance of theory and critical analysis.
4. Insight into the complex interdependence of professional specializations of the museum field as well as external forces that shape relevant job skills and responsibilities.
5. Recognition and understanding of multiple perspectives and the benefits of collaboration and critical thinking.
6. Leadership and management training integrated into the curriculum.
7. Opportunities for civic engagement and a commitment to serving the public.
8. Directed internships, practicums, or fieldwork developed and sustained, that provide essential experience and contacts as appropriate to the pedagogy of the program.

9. Teaching competencies that enable learners to be competitive in the job market and empower them to implement effective career planning and development (AAM COMPT, 2004, p. 2).

It should be noted that unlike the 1978 and 1983 AAM documents, the current *Standards and Best Practices Guidelines* (see Appendix F) do not list specific curricular areas for graduate museum studies programs such as museum history, organization and administration, and collections management. COMPT clearly recognizes the broad spectrum of graduate museum studies programs and, according to the document, intentionally avoids a “one size fits all [approach]” (AAM COMPT, 2004, p. 1).

In 2000, Terry Reynolds, Curator of Collections and Exhibits at the New Mexico State University Museum and past COMPT chair, conducted a study entitled *Training for Entry Level Museum Professionals* for COMPT. Reynolds sought to identify the skills and knowledge that museum professionals desired of entry-level museum professionals in order to provide guidance to those planning curriculum in graduate museum studies programs. She sent questionnaires to the chairs of the 10 Standing Professional Committees (SPCs) of AAM. Responses were received from eight SPC chairs including Media and Technology, Small Museum Administrators, Development and Membership, Public Relations and Marketing, Curators, Audience Research and Evaluation, Security, and Registrars. Unlike this author’s study, Reynolds did not survey existing programs to determine current areas of curricular emphasis. In addition, Reynolds only sought to identify competencies desired for entry-level museum professionals in their first few months of employment.

Based on survey results, Reynolds’ study identified specific areas in which minimum knowledge and skills were expected for entry-level museum professional and listed these areas in

order by frequency (see Table 6). From her findings, Reynolds (2000) suggests a basic core curriculum that could be utilized by graduate museum studies programs to meet the expectations of practicing museum professionals involved in hiring graduates (See Table 7). Reynolds acknowledges, however, that this core curriculum is best suited for stand-alone graduate museum studies programs that are not taught within a disciplinary department. Because this core curriculum is vocationally oriented, Reynolds asserts that it would be difficult to teach in graduate museum studies programs that are administered by traditional academic departments. She felt that besides computer and research skills, “much of the other knowledge and skill expected by the museum community is seen as not related to the important knowledge and theory which form the basis of many disciplines...Professors who are not involved with museums often consider non-discipline, vocational courses as a waste of time” (Reynolds, 2000, p. 4).

Reynolds (2000) also identifies several problems that her suggested curriculum poses for graduate museum studies programs. First, she acknowledges that some faculty and university administrators may feel that some aspects of the curriculum, such as financial management and budget basics, are inappropriate for graduate level education. Second, some faculty may see some of these courses as encroaching upon their “academic turf” (p. 4). Reynolds feels that these problems could be somewhat alleviated if the suggested curriculum was officially adopted by the AAM Council of Standing Professional Committees so that it would carry the weight of a national professional association. She also calls for AAM to begin a certification process for graduate museum studies programs in colleges and universities to give further weight to the curriculum.

Table 6

Minimum Knowledge and Skills Expected of Entry-Level Museum Professionals by Eight AAM Standing Professional Committees as Identified by Reynolds (2000).

Knowledge and skills identified by 75% of SPCs	Knowledge and skills identified by 50-75% of SPCs	Knowledge and skills identified by 25-50% of SPCs
Knowledge of various prof. responsibilities within a museum and their interrelationships	Knowledge of and skill in visitor-centered organization and activity	Knowledge of financial management and budgeting
Communication skills, written and verbal	Knowledge of and skill in interpersonal relations and teamwork	Knowledge of grant writing and fund raising
Knowledge of museum ethics	Knowledge of collection care and conservation	Knowledge of and skill in research
Knowledge of laws and regulations impacting museum activities	Knowledge of the history of museums and their role in society	Knowledge of diverse groups within society
Knowledge of and skill in using computers		Knowledge of museum governance and organization
Knowledge of the educational mission of museums		Knowledge of a traditional academic discipline such as history or art history
		Knowledge of technology in museums

Note. AAM Standing Professional Committees included in study: Media and Technology, Small Museum Administrators, Development and Membership, Public Relations and Marketing, Curators, Audience Research and Evaluation, Security, and Registrars.

Table 7

Suggested Core Curriculum for Museum Studies Programs (Reynolds, 2000)

Disciplinary Orientation	Courses
Museum-focused courses	Museum Departments and Professions Museum Ethics Laws and Regulations Impacting Museums Museums as Educational Institutions Museum Collection Care and Conservation Museum History Museum Finances Museum Governance and Organization Museums and Technology
Courses which could focus on museums or could be selected from other academic areas	Computers Communication Visitor or Customer Centered Organization Interpersonal Relations Teamwork Grant Writing Fund Raising Research Diversity in American Society
Courses from academic disciplines	History American Studies Art History Anthropology

In 1999, the Canadian Museums Association Human Resource Planning Committee published its recommended competencies for museum professionals in a special publication, *The Workforce of the Future: Competencies for the Canadian Museum Community*. According to the report, these competencies were developed not only for curriculum planning, but for use by museum administrators in human resource planning, recruitment, performance management, staff training, and career planning. The committee first listed shared competencies defined as underlying knowledge and skills that museum workers need across various museum functions. These include competencies in categories of philosophical and ethical, public value, organizational, and individual/interpersonal. Second, the committee listed “functional competencies” to perform in three broad areas of museum activity: administration, knowledge creation and preservation, and knowledge sharing (see Table 8). For each of the functional competencies, profiles are provided that define the competency and describe five levels of proficiency.

With regard to curriculum development, the Canadian Museums Association report (1999) states that competencies should be used to make higher education courses relevant to the practical professional workplace. According to the report, if the philosophical approach of curriculum development emphasizes theoretical knowledge, the use of competencies is less important. If, however, the approach emphasizes practical work and the transmission of good museum practice, competencies can play a major role.

Table 8

Recommended Competencies for Museum Work by the Canadian Museums Association (1999)

Competency grouping	Curricular Items
Shared Competencies	
Philosophical and Ethical	Ethics and values, vision and purpose, museum sense, balancing new visions and best traditions, valuing diversity
Public Value	Public focus, public promotion
Organizational	Organizational awareness, planning and organizing, managing change, process management, enterprise, evaluation, priority setting, problem solving, information gathering/research, sharing knowledge and experience
Individual/ Interpersonal	Self-management, personal initiative and leadership, innovation, life-long learning, technological literacy, communication, team work
Functional Competencies	
Administration	Governance, management, financial management, strategic planning, business and operational planning, policy development, sound business practices, facility management, security, risk management, legal literacy, project management, contract management, human resource management, supervision, labour relations, human resource development, volunteer management, public relations, marketing, advocacy, membership services, grants development, fund raising and development, revenue generation, museum external services, retail management
Knowledge Creation and Preservation	Collection management, registration, collection development, collection use, curatorial research, conservation, archival services, library services, information services
Knowledge Sharing	Intellectual access and information, services, visitor services, educational programming, public programming, interpretation, publications and products (single and multimedia), design, production

Note. From *The Workforce of the Future: Competencies for the Canadian Museum Community*. Canadian Museums Human Resources Planning Committee, Canadian Museum Association (1999).

The Canadian Museums Association report (1999) poses seven questions which should be asked in using competency work in curriculum development:

1. Are there changes in the external environment of museums that require new competencies not fully described?
2. Is the basis for the competency work you are using relevant to the curriculum that you want to design?
3. What knowledge is necessary to impart during the instruction in addition to the observable part that is identified in competencies?
4. In our knowledge based industry, what are the pure knowledge requirements necessary to support demonstrated expertise?
5. What are the things that need to be addressed in curricula about the relation of the profession to society, about imparting the techniques of getting along in the market place, about life-long learning as a skill necessary to individuals and organizations, about how to work in an organization, etc.?
6. What are the generic or shared skills that need to be taught, tested, or reinforced during the course or program?
7. Which of all things we have reviewed and decided are necessary to treat in the development of this particular course are the most important to include and emphasize? (Canadian Museums Human Resource Planning Committee, 1999, pp. 10-11).

More recently, in 2000, the International Committee on the Training of Professionals (ICTOP) of the International Council of Museums (ICOM) published *Curricula Guidelines for Museum Professional Development*. See Appendix G for a full list of the ICOM competencies.

These guidelines define five broad areas of competencies perceived as necessary to work effectively in today's museums. First, these include general competencies in areas such as communications, financial management, evaluation methods, and information technology. Second, museology competencies listed include the role of museums in society, issues in museum practice, and legal context for practice. The third area, management competencies, includes architecture, fund raising and grant development, and organizational theory. The fourth area of competency, public programming, includes exhibitions, education and interpretation, and visitor service and public relationships. The final area of competency is information and collections management. It includes a variety of topics related to archives and object collections. (International Council of Museums, 2000).

Some authors argue that the AAM guidelines are vastly outdated, and the ICOM guidelines do not specifically address the need for certain critical thinking abilities (Fuller, 2005). Others argue that these guidelines do not go far enough to emphasize the need for field experiences in museums and hands-on experiences (Danilov, 1994; MacLeod, 2003; Genoways, 2006). Some believe it is time for AAM to initiate the development of a new set of curricula guidelines that addresses the new needs of the museum profession (Fuller, 2005). Glaser and Zenetou (1996), Reynolds (2000), and Genoways (2006) have argued that AAM go even further, and expand their museum accreditation program to include formal accreditation for graduate museum studies programs. This review of the literature has found no evidence that the applicability or relevancy of any of the abovementioned lists of competencies has ever been researched.

Current Teaching and Curricula in Museum Studies

A review of the literature on teaching and curricula in museum studies graduate programs reveals few sources on the topic. Various articles by respected museum professionals and nationally respected scholars in the field of museum studies present a variety of disparate perspectives ranging from what should be taught in graduate museum studies programs to whether museum studies training is preferable to on-the-job training.

Nearly two generations ago, in 1973, the *AAM Guide to Museum Studies* made the argument against the traditional training route of a graduate degree in an academic discipline followed by prolonged on-the-job training in a museum, arguing that while this model may have worked when the profession was small and less complex, it wastes time and does not ensure that museum personnel have any uniform training, as found in libraries, for example. The report also boldly states that this approach has weakened the museum profession as personnel give “their allegiance to their subject-matter disciplines” (AAM, 1973, p. 11). Yet profession accreditation of graduate museum studies programs has yet to emerge.

Many authors (Porter, 1991; Glaser & Zenetou, 1996; Genoways & Ireland, 2003) strongly support the need for graduate museum studies programs. Porter (1991) makes a relevant argument that the traditional training route in an academic discipline followed by on-the-job learning of museum skills is being seriously challenged because of financial pressures, and “governing bodies requiring better prepared directors and staff members who do not have to learn their skills on the job at the employer’s expense” (p. 59). Genoways (2006), echoes this argument saying,

Museums with reduced budgets and reduced numbers of staff will no longer find acceptable an extended apprenticeship for each new staff member. It will simply be too

expensive, both in time and dollars, especially if museums can access a workforce of people who have paid for their own education (p. 230).

Yet the debate is not settled. Teather (1991) has argued that while the literature on museum related topics is extensive, most topics are technical in nature and a museological method of inquiry has not sufficiently developed to consider museum studies a formal discipline. Indeed quantitative research of art museum directors found that most viewed on-the-job training as playing a much greater role in their professional development than museum studies and related training (DiMaggio, 1988). Australian museum consultant and museum leadership author Sherene Suchy (2000) does not advocate turning to higher education as a source for museum studies training. She argues instead for the creation of in-house professional development museum studies programs in museums that emphasize problem-based learning related to contemporary museum issues.

Jay Rounds (2001) responded to arguments that museum studies is underdeveloped as a discipline by conducting an empirical citation analysis of recent journal articles and books to determine if a core literature in museum studies has developed. He constructed a database of citations made in recent years in the journals *Curator* (1993-1999), *Exhibitionist* (1995-2000), *Journal of Museum Education* (1995-1999), and *Museum News* (1996-2000), as well as the special 1999 issue of *Daedalus* on "American Museums." Thirteen books that had been frequently cited or reviewed by the leading journals were also included. The database included 6,110 citations made to 2,538 different source items. He found a significant number of highly-cited sources. Most of the highly-cited authors (80%) were associated with museums, contradicting dissenters who argue that museum studies literature is merely borrowed from

academic disciplines. Rounds concluded that while much more research is needed, a core literature has clearly emerged.

Some authors have written about model graduate museum studies programs and have articulated their thoughts on what the future should hold for museum studies education. Danilov (1994) favors the model of the Department of Museum Studies at John F. Kennedy University in San Francisco. That program seeks to balance hands-on training in museum skills with exploration of “contemporary museum issues such as cultural interpretation, interactive and multimedia exhibition design, and diverse audience development” (pp. 106-107). Krech and Gregg (2004) cite the program at Brown University, which stresses that students should experience all aspects of exhibit development by participating in the production of a real exhibit. Krech and Gregg also stress that students must be exposed to contemporary issues, problems and controversies. Robinson (2007) stresses that students should be exposed to large museums with national reputations. He also feels that there should be a balance of hands-on experience through activities such as producing an exhibit from start to finish, and an immersion in the subject to develop a sense for the museum “way of thinking” (p. 34).

Dillenburg (2006) conducted interviews with museum studies professors and museum exhibition practitioners for an article in *Exhibitionist*. He found that museum studies professors repeatedly stressed the importance of theory and context, but practitioners, in sharp contrast, emphasized the importance of work experience. An exhibits director in a children’s museum said, “Prior museum experience is the key. If it’s a choice between a candidate with experience and one with a degree, you go with the experience” (p. 66). A museum director complained that programs teach “ivory tower ideals that can’t be afforded in a million years” (p. 66). Ironically, most graduate museum studies programs now emphasize practical experience across their

curricula and most require internships (Dillenburg, 2006). Dillenburg quotes Lynne Robertson, chair of AAM's Committee on Museum Professional Training, "Excellent programs give students lots of hands-on, real work" (p. 66). A graduate of the Cooperstown program insisted, "Everything we did was real work, not just class assignments. The projects allow you to apply theory to the real world... We learned to tweak the ideal to fit the situation" (p. 66). Dillenburg argues that experience is not valuable unless the individual can learn from it, and "this is where museum studies gives students an edge" (p. 67).

A comprehensive analysis of graduate museum studies programs and curricula in Canada and the United States, *Museum Studies: Perspectives and Innovations* was published in 2007 (Williams & Hawks, eds.). In Simmons' chapter, he provides an inventory of all graduate degree granting museum studies programs in North America listing any specializations for each program, the total credits required, and the number of museum studies credits required. Simmons uses his inventory of programs to take issue with Malt (1987) who categorized graduate museum studies programs in the United States as focused on science, education, history, or art. Simmons points out that Malt had argued that programs in the United States were slow to adopt European models for diploma programs, perhaps suggesting that higher education institutions were left to develop programs that were rooted in academic disciplines. Simmons (2007) argues that Malt's categorizations are "too general to be informative, and in many cases are incorrect" (p. 115). For example, some of the programs that Malt listed as being focused in one of these disciplines require students to take a museum core curriculum, regardless of their disciplinary track. Simmons found in an analysis of 25 programs, an average of 66% of the credits required for graduation are in museum studies courses.

Some have noted that the impending retirement of the “baby boomer” generation will soon have a profound impact on museum leadership. In 2006, noting that the State of New York will likely lose one fourth of its workforce (3,000 veteran workers) to retirement in the next 14 years, the Museum Association of New York (MANY) issued a white paper authored by the association’s program director, Joan H. Baldwin. Baldwin’s question was, “Where and how will museums find future leaders?” (p. 3). She notes that the current generation of museum leaders mostly entered the profession in the 1960s and early 1970s motivated by a passion for their area of study and “they translated that passion into leadership. Those who climbed to the top understood that the world of the scholarly museum director, who was more chief curator than chief fundraiser, was over. They adapted, reinventing themselves and their institutions” (p. 4).

In an effort to develop recommendations for the museum community and graduate museum studies programs, MANY conducted in-house surveys of New York’s museum community and led a series of three discussion sessions involving current and emerging leaders, graduate students, and chairs of graduate museum studies programs. On the issue of leadership, MANY found that while seasoned museum leaders were pleased that museum graduate programs included training in leadership and management skills, they still felt that on-the-job development of these skills was more important. Some museum directors stated that they would rather hire graduates with content area degrees than museum studies graduates because as one stated, “I can teach them the other stuff when they get here” (p. 11). In contrast, younger entry-level, mid career museum professionals and graduate students expressed a desire for museum studies training that included management topics such as leadership, human resources, communication skills, audience development, strategic planning and finance. As a result of the discussions and surveys, MANY developed an “Agenda for Building Leadership” that includes recommendations

for museum professionals, museum professional associations, museum studies graduate programs, and the museum community in general. For museum studies graduate programs in particular, immediate and future actions steps are presented:

IMMEDIATE ACTION STEPS:

1. Treat leadership as a complex and evolving subject deserving in-depth examination.
2. Work with MANY to track the professional trajectories of graduates; analyze trends.
3. Work with MANY on building leadership training opportunities for graduate students, [and] wholly independent programs for mid-career leaders.
4. Create scholarship programs specifically for internships.

FUTURE ACTION STEPS:

1. Implement tracks of museum leadership study leading to certificates or degrees.
2. Implement leadership/managerial partnerships with MANY.
3. Work collaboratively to address issues of gender bias and inequity

(Baldwin, 2006, p. 15).

In the previous section on the history of museums and museum work, it was argued that museums today have not only grown in numbers, but have redefined themselves in recent decades expanding “into new important areas of responsibility, particularly the increasing recognition that museums must accept a far wider educational and social role within their society and community” (Boylan, 2006, p. 417). The changing nature of museums has resulted in a decline in the number of traditional academic curators and a growth in areas such as administration, fundraising, education, and exhibition work. These changes have been accompanied by trends of increased specialization in all areas of museum work including conservation, registration, and collections management (Boylan, 2006). These trends increase the

importance of museum studies education, but Boylan (2006) believes that “Museum professional training is...failing to keep up with these major changes” (p. 421). Museum studies education is challenged not only by rapid changes in the nature of museum work, but by a field that still includes some who argue over the professional status of museum workers and the appropriateness of museum studies training. As Boylan (2006) says, “There is still much to be done to convince employers - and, sadly, some fellow professionals – that professional training and qualifications are essential in the face of the increasing complexity of museum work” (p. 430).

Conclusion

The preceding review of the literature included a discussion of the history of the development of museum studies in the United States showing a gradual acceptance of academic training in the skills, knowledge, philosophy, and ethics specific to museum work. This acceptance of museum studies has been made possible by the gradual historical acceptance of museum work as a profession. The rapid growth of graduate museum studies programs in the 1960s and 1970s resulted in wide variance of degrees offered, focus and scope of programs, and relationships with academic disciplines. Numerous committees of the American Association of Museums and the International Council on Museums have made recommendations for museum studies curricula including lists of competencies that should be mastered by students. This review of the literature has found no evidence that the appropriateness or relevancy of any of the above mentioned lists of competencies or current museum studies curricula have been extensively researched.

CHAPTER 3

METHODOLOGY

A primarily quantitative research strategy was utilized to answer the central research question, “How are graduate museum studies programs in the United States meeting the current and anticipated future needs of the museum profession?” Data were gathered from two groups: program chairs from graduate museum studies programs, and respected leaders in the museum profession. Program chairs from graduate programs that offer degrees or certificates in museum studies were surveyed to determine what is taught and emphasized in these programs, and to make conclusions about what is valued in higher education museum studies curricula. A “jury of experts” selected from respected leaders in the museum profession, was also surveyed to make conclusions on what knowledge, skills, values, and abilities they expect new museum professionals to possess. Both surveys also included some open-ended questions. This process thus allows for comparison for what is valued by museum leaders and what is emphasized in graduate museum studies curricula.

Research Questions

In order to answer the central research question, “How are graduate museum studies programs in the United States meeting the current and anticipated future needs of the museum profession?,” data was gathered to answer several secondary research questions:

1. What competencies (knowledge, skills, values, and abilities) do respected leaders in the museum profession most expect new museum professionals to possess to meet current and anticipated future needs?
2. What is currently taught in graduate museum studies programs in the United States and which curriculum areas are most emphasized?

Instrument Design

Complimentary survey instruments were designed for use in this study. One was sent to respected leaders in the museum profession (see Appendix H). The other was sent to program chairs of graduate museum studies programs in the United States (see Appendix I). Both instruments were web-based utilizing Qualtrics software. Instruments were primarily quantitative; each also included one section of open-ended questions.

Prior to conducting the survey, both instruments were reviewed by three nationally recognized museum studies experts: Lynne Ireland, Deputy Director of the Nebraska State Historical Society and former professor of museum studies; Phillip Katz, Assistant Director of Research, American Association of Museums (AAM); and Elizabeth Merritt, Director, Center for the Future of Museums, AAM. All three experts agreed on the appropriateness of using the International Council of Museums' International Committee for the Training of Personnel (ICOM-ICTOP) Curricula Guidelines for Museum Professional Development as the basis for the rating of competencies section on each of the two complimentary instruments.

Based on input from these experts, several changes were made to the instruments. First, questions were added related to racial and gender diversity in graduate museum studies programs and in the museum profession. Second, demographic categories were clarified. Two groups of categories were changed to align with standard categories currently used in research by AAM-- types of museums by discipline and museum budget size ranges. Regarding the questions related to whether or not participants had a degree or certificate in museum studies, additional closely related disciplines such as public history and arts administration were added. Third, in the rating of competencies section of the instruments, definitions were provided for the term "entry-level professional museum positions" and for rating points on the scale. Fourth, in the open-ended

sections of both instruments, questions were added asking participants to identify which of the competencies they felt was most important and why; and which competency is most often lacking. On the program chairs instrument, a question was added asking participants to describe internships and field experiences in their curricula.

Instrument for Program Chairs

The final survey instrument for program chairs contained four sections of questions: personal background questions, museum studies program background questions, rating of museum competencies, and open-ended questions. Personal background questions were included to determine the level of education, disciplinary orientation, and museum experience of program chairs themselves. The museum studies program background section included questions on the program's disciplinary orientation (if any), organizational structure, credential offered, number of faculty with experience in museum work, and size and level of diversity of faculty and students. The rating of museum competencies section listed competencies adapted from the ICOM-ICTOP Curricula Guidelines for Museum Professional Development, Revised Edition February 2008 (ICOM, 2008). Participants were asked to rate each competency on a five point rating scale based on the level of knowledge or ability that they believe students reach through the curriculum in their museum studies program.

The open-ended section included questions that asked participants to describe any other competencies they use in developing curriculum, what is lacking in graduates of their program, the changing needs of the museum profession and how graduate museum studies programs are meeting these changing needs, and what should be done to increase diversity in the museum profession.

Instrument for Museum Leaders

The final survey instrument for museum leaders also contained three sections of questions related to personal background, rating of museum competencies, and qualitative questions. The personal background section included questions on the size and type of museum in which the participant works, number of years of museum experience, highest degree earned, discipline of highest degree, and extent of academic training in museum studies or related disciplines such as arts administration or public history.

The qualitative section included questions that asked museum leaders to describe any other competencies or criteria they use to assess the qualifications of potential staff members, to describe why certain competencies are important, what skills or competencies are most often lacking in applicants for entry-level museum positions, how one should prepare for entry in to the museum field, what are the changing needs of the museum profession and how are graduate museum studies programs meeting these changing needs, and what should be done to increase diversity in the museum profession.

The rating of museum competencies section for museum leaders was identical to the instrument for museum studies program chairs, except that it asked museum leaders to rate for each competency the level of knowledge or ability that they believe is necessary for entry-level professional museum positions (defined on the instrument as “positions typically filled with recent college graduates with little employed museum experience”). This wording differed from the instrument for program chairs, which asked that competencies be rated according to the level of knowledge or ability that they believe is reached by students through the curriculum of their museum studies program. The difference in wording of the questions was necessary because the

researcher wanted to compare and contrast what is emphasized in the graduate museum studies programs with what is expected by museum leaders of entry-level museum professionals.

Rating of Competencies

For this study, the most important section of the survey instruments was the rating of competencies section. As mentioned earlier, participants were asked to rate competencies taken from the ICOM-ICTOP Curricula Guidelines for Museum Professional Development, Revised Edition February 2008 (ICOM, 2008). The ICOM-ICTOP document includes 65 competencies, divided into five sections. To avoid researcher bias that could result from the elimination of some competencies, the researcher chose to retain the same five sections and all 65 competencies: general competencies (12), museology competencies (7), management competencies (19), public programming competencies (9), and information and collections management and care competencies (18). The definitions for the competencies on each instrument were taken directly from the ICOM-ICTOP Curricula Guidelines (See Appendixes H and I for definitions as they appeared on the instruments). The researcher developed a five point ordinal scale with definitions that was provided on the instruments for use in rating each competency:

1. No knowledge or ability
2. Basic level of knowledge or ability: able to perform tasks related to this competency with supervision.
3. Moderate level of knowledge or ability: able to perform tasks related to this competency with very little supervision.
4. High level of knowledge or ability: able to perform tasks related to this competency without supervision.

5. Expert level of knowledge or ability: able to lead and supervise others in tasks related to this competency.

Subject Population and Recruitment

The first group of potential subjects, program chairs from museum studies graduate programs in the United States, included the entire population of all 54 program chairs in the United States that are self-described as having a museum studies curriculum that offer either a graduate degree or certificate. Programs were identified through the directory of museum studies programs maintained by the Smithsonian Institution Center for Education and Museum Studies (2011) on its website. Contact information was obtained from each program's website. Chairs were recruited by an e-mail letter sent by the researcher with a link to the web-based survey instrument.

The second group of potential subjects was a "jury of experts" selected from leaders in the museum profession. It consisted of the entire population of people who have been elected to the boards of directors of the American Association of Museums (AAM) and the American Association for State and Local History (AASLH) from 1991-2010. These groups were chosen, at the recommendation of museum studies expert Lynne Ireland, because they were elected by members of the museum profession to lead the two largest national associations representing museums across the United States. There were 67 people in the AAM group and 85 in the AASLH group providing a combined total population of 152 museum leaders. The AASLH central office provided the researcher with the names and contact information of its board members from 1991 to 2010. The researcher recruited participants from the AASLH group with an e-mail letter with a link to the web-based survey instrument. The American Association of Museums elected against providing the researcher with contact information citing the need to

protect their privacy, but did agree to forward the researcher's e-mail one time to all of their board members who served from 1991 to 2010.

In order to maximize the response rate, the researcher made phone calls to all program chairs and AASLH board members who did not participate in the survey within one month. The survey was resent twice over a subsequent two month period to those who had not responded. The researcher was unable to track which AAM board members had not responded because their survey links were not emailed directly from Qualtrics software. The link sent by the AAM office was simply a generic hyperlink. The researcher was determined to personally contact as many potential participants as possible, however, so he obtained lists of names of the 67 AAM board members from AAM Annual Reports who served from 1991 to 2010 and searched for contact information on the internet. The researcher found contact information for 39 of these AAM board members and contacted each by telephone and email.

Quantitative Data Analysis

The researcher utilized Qualtrics web based survey software and Microsoft Excel for calculations to provide descriptive statistics for the two groups, museum leaders and museum studies program chairs, based on the personal background questions and museum studies program background questions on the survey instruments. Statistical Package for the Social Sciences (SPSS) software was used for the computation of all statistical tests related to the rating of competencies. Data was exported directly from Qualtrics web-based survey software into an SPSS database. Incomplete surveys were deleted prior to running statistical tests. A significance level of $\alpha=.05$ was used for all statistical tests.

The researcher wanted to determine which competencies are valued most and least by museum leaders and museum studies program chairs and differences and similarities among and

between the two groups. Numeric values were assigned to each point on the rating scale for the purpose of scoring each rating. The researcher utilized Microsoft Excel to calculate the median scores for each group for each competency and to produce figures. Analysis of the median scores for each competency was utilized as a measure of central tendency rather than the mean scores because the five point scale developed by the researcher was an ordinal, rather than a true interval scale. Although the five point scale was an ascending rating scale, labels and definitions were assigned to each point on the scale. It would not be appropriate to assume an equal range of difference between each item on the scale. For example, one respondent might assume a greater difference between “high level of knowledge or ability” and “expert level of knowledge or ability” than another respondent. In addition, as mentioned above, the wording of the question for the rating of competencies was slightly different for each of the two groups. Museum studies program chairs were asked to rate each item according to the level that they believe students achieve through the curriculum of their program, and museum leaders were asked to rate each item according to the level that they believe is necessary for entry-level professional museum positions. The difference in the ways in which the two groups approached the rating could have influenced the way they viewed the interval between rating categories. For these reasons, analysis of the mean scores for each competency is not appropriate. As Stevens (1946) observed, “...means and standard deviations computed on an ordinal scale are in error to the extent that the successive intervals on the scale are unequal in size. When only the rank-order of data is known, we should proceed cautiously with our statistics, and especially the conclusions we draw from them” (p. 679). Stevens explains that permissible statistical analysis for ordinal scales include the study of medians and percentiles.

The researcher also wanted to determine if there was agreement or disagreement between the two groups, museum leaders and museum studies program chairs, for each of the competencies rated by participants. The Mann-Whitney U test was selected as an appropriate non-parametric test to determine if the distribution of scores for each competency was the same or statistically different for each of the two groups across the rating categories. The Mann-Whitney U test examines the similarity of distributions of scores between two groups, rather than means. Therefore, it is an appropriate test for data based on an ordinal scale (Green & Salkind, 2011).

In order to determine the degree of difference in the median scores for both groups for each competency, the researcher calculated effect size ($r=z/\sqrt{N}$). The following scale was used for basing effect size on r values: a value below .3 is a small effect, a value of .3 to .49 is a moderate effect, a value of .50 or above is a large effect.

Analysis of Responses to Open-Ended Questions

Open-ended questions were included in both surveys to draw conclusions about perceptions of museum studies as a field of study, most important competencies, appropriate routes of entry into the museum profession, diversity in the museum profession, and the changing needs of the museum profession in the 21st century. The researcher utilized a strategy described by Merriam (1998) to manage and analyze the data. A simple coding scheme was used to make note of issues raised by respondents in the narrative responses. In the analysis of the data, the researcher looked for recurring issues that formed the basis for creating and assigning themes.

Criteria for Inclusion in the Study

This study only included graduate museum studies programs in the United States that offer either a degree or certificate in museum studies, museum science, or museology, as defined in the above definitions of terms. To have been included in this study, certificate programs must offer a certificate in museum studies in association with a graduate degree in a museum related academic discipline such as anthropology, art, art history, history, or one of the natural sciences. Many colleges and universities may offer an elective course or courses in museum studies that are not part of a degree or certificate program. These institutions were not included.

The population of museum leaders included all museum professionals who have served on the Boards of Directors for the American Association of Museums and the American Association for State and Local History from 1991-2010.

Researcher Positionality

The researcher is a museum professional with 23 years experience working in museums and historic sites and is currently employed by The University of Alabama Museums. The researcher holds a Master of Arts degree (1993) in museum studies from the discontinued museum studies program at the University of Nebraska. In addition, the researcher teaches one annual museum studies class for graduate and undergraduate students, Museum Administration and Management, as adjunct faculty at the University of Alabama. The researcher has had more interaction in his career with state and local museum groups such as the Southeastern Museums Conference (SEMC), the Georgia Association of Museums and Galleries (GAMG), and the Alabama Museums Association (AMA) than with national organizations such as AAM. The researcher has served on the board, and as President, of AMA and has served on the boards of the SEMC and the GAMG.

CHAPTER 4

ANALYSIS OF RESULTS

The purpose of this study was to assess how graduate museum studies programs in the United States are meeting the needs of the museum profession. In order to answer the primary research question, leaders in the museum profession were surveyed to determine what skills and competencies are desired in entry-level museum professionals. Chairs of graduate museum studies programs were also surveyed to determine what is emphasized in their program's curricula. Curricular emphasis was determined by asking them to rate the level of knowledge or ability is reached by graduates through the curriculum of their program.

This chapter presents the descriptive and statistical analysis of the data generated in this study. First, data on the response rate and sample size is presented. Second, a description of the characteristics of both sample groups is provided based on answers to personal background questions. For the museum studies program chairs group, a description of the graduate museum studies programs represented by the sample is also provided based on program background questions. Third, the rating of competencies is presented for each group to show which competencies are most and least emphasized in graduate museum studies programs and which competencies are most and least valued in entry-level museum professionals by museum leaders. Fourth, statistical analysis of the rating of competencies is provided using the Mann-Whitney *U* test to determine whether there are statistically significant differences in distribution of ratings for each competency between the museum leaders and museum studies program chairs. A significance level of $\alpha=.05$ was used for all statistical tests. Finally, the findings based on open-ended responses are organized by topic with discussion of themes that emerged from analysis of the responses.

Response Rate and Sample Size

After deleting twelve incomplete surveys, the sample size for museum leaders totaled 38 out of the population of 152, for a response rate of 25%. The sample size for museum studies program chairs totaled 32 out of the total population of 54 for a response rate of 59%. Table 9 presents the sources of the final data used in this study.

Table 9
Returned and Completed Surveys

	Population	<i>f</i>	%
Museum Leaders	152	38	25
Museum Studies Prog. Chairs	54	32	59

Because the response rate for the museum leaders was lower than desired by the researcher, an analysis of this sample was conducted to determine if respondents were from museums that were representative of the distribution of all museums in the United States by discipline. Table 10 and Figure 1 illustrate the similarity in distribution of museums represented by the sample of museum leaders with the overall distribution of museums in the United States by discipline. The distribution is especially similar for the two largest types of museums, with the sample including 15.8% from art museums, compared to the representation of art museums among all museums in the United States of 15.5%. The sample included 58% from historic sites/history museums; this compares to their representation across all museums in the United States of 49%.

Table 10

Distribution of Museums Represented by Sample of Museum Leaders and Museums in the U.S. by Discipline

	Sample of Museum Leaders (%)	Museums in the U.S. (%)
Art Museum	16	16
Children's/Youth Museum	3	5
General Museum	11	5
Historic Site/History Museum/Hist. Home	58	49
Natural History/Anthropology Museum	5	4
Specialized and Other Museum	8	22

Note. Distribution of museums in the U.S. by discipline is derived from the Urban Institute/Institute of Museum and Library Services Museum Public Finance Survey, 2008. Adapted from “Museum Financial Information 2009,” by P. Katz and E. Merritt (Ed.), 2009, p. 23.

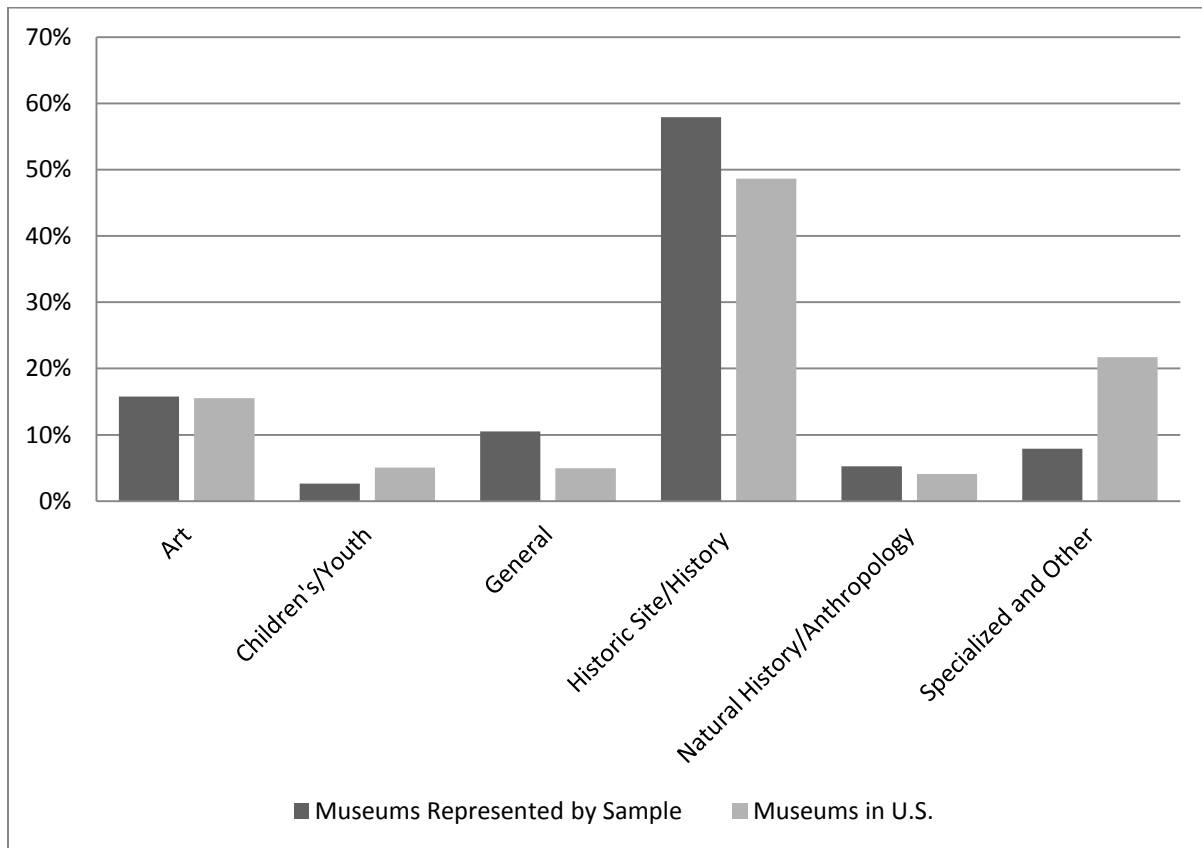


Figure 1. Distribution of museums represented by the sample of museum leaders and museums in the U.S. by discipline.

Note. Distribution of Museums in the U.S. by discipline is derived from the Urban Institute/Institute of Museum and Library Services Museum Public Finance Survey, 2008. Adapted from “Museum Financial Information 2009,” by P. Katz and E. Merritt (Ed.), 2009, p. 23.

Description of the Sample of Museum Leaders

Museum leaders were asked to provide demographic data about themselves and the museum in which they work. These items included the type and size of their employing museum, the number of years employed in the museum field, their highest academic degree earned, the discipline of highest academic degree, whether they have taken courses in museum studies or a closely related field, and whether they hold a degree or certificate in museum studies or a closely related field. Table 11 shows frequencies and percentages for employing museum type for participating museum leaders with history museums/historical societies accounting for 55%, art museums 16%, and general museums 11%. The remaining respondents identified their employing museums as natural history/anthropology, “other,” children’s/youth, historic home/site, and specialized, making up a combined 18%.

Table 11
Frequencies and Percentages for Participating Museum Leader’s Employing Museum Type

	<i>f</i>	%
Aquarium	0	0
Arboretum/Botanic Garden	0	0
Art Museum	6	16
Children's/ Youth Museum	1	3
General Museum	4	11
Historic Home/ Site	1	3
History Museum/ Historical Society	21	55
Natural History/ Anthropology	2	5
Nature Center	0	0
Science/ Technology Center	0	0
Specialized Museum	1	3
Zoo	0	0
Other	2	5
Total	38	101

Note. Standard AAM categories were used. The instrument defined the following museum categories: General Museum-a museum that addresses two or more disciplines to a significant extent. Specialized Museum-a museum that does not fall into or combine any of the discipline areas listed here. Other-not primarily a museum but with some museum like functions.

The frequencies and percentages for the size of the museum leaders' employing museums (by annual budget) are presented in Table 12. The majority of participating museum leaders work in larger museums: 37% work in museums with budgets over \$4,000,000, 32% with budgets of \$1,000,000 to \$4,000,000, and twelve (32%) work in museums with annual budgets less than \$1,000,000.

Table 12
Size of Participating Museum Leader's Employing Museums by Annual Budget, Frequencies and Percentages

	<i>f</i>	%	Cumulative %
Over \$4,000,000	14	37	37
\$1,000,000-\$4,000,000	12	32	69
\$250,000-\$1,000,000	8	21	90
\$75,000-\$250,000	3	8	98
Under \$75,000	1	3	101
Total	38	101	

Note. Standard AAM budget categories were used.

Table 13 presents the frequencies and percentages for the number of years that participating museum leaders have worked in the museum field. The majority (63%) have over 30 years full-time experience in museums. The cumulative percent for the two largest categories shows that 90% of participating museum leaders have over 20 years experience in museums.

Table 13
Years of Full Time Employment in the Museum Field by Participating Museum Leaders, Frequencies and Percentages

	<i>f</i>	%	Cumulative %
Over 30	24	63	63
20-29	10	26	89
10-19	3	8	97
Less than 10	1	3	100
Total	38	100	

The frequencies and percentages for the highest academic degree earned by participating museum leaders are shown in Table 14. Twenty-four percent have earned the Ph.D. and 61%

reported the master's degree as their highest academic degree earned. The cumulative percent for these categories shows that 84% of participating museum leaders have earned at least the master's degree.

Table 14
Highest Academic Degree Earned by Participating Museum Leaders, Frequencies and Percentages

	<i>f</i>	%	Cumulative %
Ph.D.	9	24	24
Professional Degree (MD, JD, DVM, etc.)	0	0	24
Masters	23	61	85
Bachelors	6	16	101
Associates	0	0	
High School Diploma	0	0	
Other	0	0	
Total	38	101	

Museum leaders were asked to provide the discipline of their highest academic degree. Each participant responded ($N=38$), but nine listed more than one major indicating a double major or two equivalent highest degrees. Table 15 shows the frequencies and percentages for the discipline of the highest degree earned by participating museum leaders. History was the most common response with 34%. Museum studies was the second most popular response with 22%.

Table 15
Discipline of Highest Degree Earned by Participating Museum Leaders, Frequencies and Percentages

	<i>f</i>	%
History	11	34
Museum Studies	7	22
Anthropology/Archaeology	6	19
Art/Art History	6	19
Education	3	9
American Studies	3	9
Business	3	9
Biological Sciences	2	5
Science	1	3
Latin American Studies	1	3
Religious Studies	1	3
American Folk Culture	1	3
Psychology	1	3
Humanities	1	3

Note. $N=38$. Nine participants listed more than one discipline.

Museum leaders were asked if they had ever taken any courses in museum studies or closely related disciplines (public history, cultural resource management, historic preservation, arts administration/management, and arts conservation). Seventeen respondents (45%) indicated that they had taken courses in museum studies specifically. Twenty-one respondents (55%) reported taking courses in museum studies or one of the related disciplines. Museum leaders were also asked if they hold a degree or certificate in museum studies or one of the closely related disciplines listed above. Nine participating museum leaders (24%) reported that they have a degree in museum studies specifically. Fourteen respondents (37%) indicated that they hold a degree in museum studies or one of the related disciplines.

Description of the Sample of Museum Studies Program Chairs

Museum studies program chairs were asked to provide demographic data about themselves. This data included whether or not they worked in a museum while serving as a program chair, the position they held in a museum, the type of museum in which they work, the highest academic degree that they have earned, the discipline of their highest degree, whether or not they have ever worked full time in a museum, the number of years they have worked full time in museums, whether they have taken courses in museum studies or a related field, and whether they hold a degree or certificate in museum studies or a related field.

Thirteen participating program chairs (41%) reported that they currently work in a museum in addition to serving as chair of a university-based graduate museum studies program. Eight of these program chairs provided the position that they hold in a museum: Director (3), and one each for Assistant Director, Administration, Anthropology Collections Manager and Internship Coordinator, Communications Coordinator, and Curator for Special Projects. Table 16

shows the frequencies and percentages for the type of employing museum for those program chairs. Art museums account for 50%, and natural history/anthropology museums account for 33%. The remaining respondents identified their employing museums as general museums and history museums/historical societies making up a combined 17%.

Table 16
Participating Program Chairs Employing Museum Type, Frequencies and Percentages

	<i>f</i>	%	Valid %
Aquarium	0	0	0.0
Arboretum/Botanic Garden	0	0	0.0
Art Museum	6	46	50.0
Children's/ Youth Museum	0	0	0.0
General Museum	1	8	8.3
Historic Home/ Site	0	0	0.0
History Museum/ Historical Society	1	8	8.3
Natural History/ Anthropology	4	31	33.3
Nature Center	0	0	0.0
Science/ Technology Center	0	0	0.0
Specialized Museum	0	0	0.0
Zoo	0	0	0.0
Other	0	0	0.0
Total	12	93	100.0
Missing (question not answered)	1	8	
Total	13	101	

Note. Standard AAM categories were used. This question was only available to the 13 participants who indicated that they currently work in a museum in addition to serving as a program chair. For this question, $N=13$. The instrument defined the following museum categories: General Museum-a museum that addresses two or more disciplines to a significant extent. Specialized Museum-a museum that does not fall into or combine any of the discipline areas listed here. Other-not primarily a museum but with some museum like functions.

The frequencies and percentages for the highest academic degree earned by participating program chairs are shown in Table 17. Seventy-five percent have earned the Ph.D. and 22% reported the master's degree as their highest academic degree earned. The cumulative percent for

these categories shows that 97% of participating program chairs have earned at least the master's degree.

Table 17
Highest Academic Degree Earned by Participating Program Chairs, Frequencies and Percentages

	<i>f</i>	%	Valid %	Cumulative %
Ph.D.	24	75	75	75
Professional Degree (MD, JD, DVM, etc)	0	0	0	75
Masters	7	22	22	97
Bachelors	1	3	3	100
Associates	0	0	0	
Other	0	0	0	
Total	32	100	100	

Museum studies program chairs were asked to identify the discipline of their highest academic degree. Table 18 presents the frequencies and percentages for the disciplines of the highest academic degree earned. More participating program chairs have their highest degrees in art or art history than any other discipline (22%). Museum studies was the second most common discipline with 16%. It should be noted that if the categories of education and art education were combined, they would comprise the second most common discipline with 19%.

Table 18
Discipline of Highest Degree Earned by Participating Museum Studies Program Chairs, Frequencies and Percentages

	<i>f</i>	%
Art/Art History	7	22
Museum Studies	5	16
Anthropology	4	13
History	4	13
Education	3	9
Art Education	3	9
American Studies	2	6
Folklore	1	3
Business	1	3
Philosophy	1	3
Humanities	1	3
Total	32	100

Participating museum studies program chairs were asked if they have ever worked full time in a museum. Twenty-seven (84%) have worked full time in a museum while five (16%) have never worked full time in a museum. Table 19 presents the frequencies and percentages for the number of years that participating program chairs have worked full time in museums.

Table 19
Years of Full Time Employment in the Museum Field by Participating Museum Studies Program Chairs, Frequencies and Percentages

	<i>f</i>	%	Valid %	Cumulative %
Over 30	2	7	7.7	7.7
20-29	10	37	38.4	46.1
10-19	4	15	15.4	61.5
Less than 10	10	37	38.4	100.0
Total	26	96	100.0	
Missing	1	4		
Total	27	100		

Note. This question was only available to the 27 participants who indicated that they have ever worked full time in a museum. For this question, N=27.

Museum studies program chairs were asked if they have ever taken any courses in museum studies or closely related disciplines (public history, cultural resource management, historic preservation, arts administration/management, and arts conservation). Seventeen respondents (53%) indicated that they had taken courses in museum studies specifically. Twenty-four participating program chairs (75%) reported taking courses in museum studies or one of the related disciplines. Museum studies program chairs were also asked if they hold a degree or certificate in museum studies or one of the closely related disciplines listed above. Eleven participating program chairs (34%) reported that they have a degree in museum studies specifically. Thirteen respondents (40%) indicated that they hold a degree in museum studies or one of the related disciplines.

Description of Graduate Museum Studies Programs Represented by Program Chairs

Museum studies program chairs were asked questions related to the characteristics of their academic programs. This data included the credentials offered by their program, how their program is organized in their institution, the disciplinary orientation of their program, the types of museum work to which their program is oriented, the size of their program based on number of graduates, gender and race of graduates, number of faculty in their program, number of faculty with experience working in museums, and gender and race of faculty.

The frequencies and percentages for the credentials offered by museum studies programs represented in the study are presented in Table 20. The master's degree is the most common credential offered at 78%. A certificate is the second most common credential offered at 50%. Only two programs (6%) represented in the study offer a doctoral degree.

Table 20
Credentials Offered by Represented Museum Studies Programs, Frequencies and Percentages

	<i>f</i>	%
Certificate	16	50
Bachelor's Degree	1	3
Master's Degree	25	78
Doctoral Degree	2	6
Other	2	6

Note. N=32. Participants were able to select more than one credential. Many programs offer multiple credentials.

A Key Distinction: Independent Departments

Museum studies program chairs were asked how their programs are organized at their institutions. Fifteen programs (47%) are organized as a distinct academic unit, while 17 programs (53%) are administered through another academic department. Of the 17 programs administered through another academic department, 15 program chairs specified the department

that administers their program as follows: Art/art history (8), History (3), and one each for American Studies, Anthropology, Arts Administration, and Educational Leadership.

The majority of graduate museum studies programs (53%) represented in this study that are administered through another academic department are administered through departments of art or art history.

Regarding the disciplinary orientation of graduate museum studies programs, 28 of the programs represented in this study (88%) prepare graduates for work in various types of museums, while four of the programs (13%) prepare graduates for work in a particular type of museum. Of the four programs that prepare graduates for work in a specific type of museum, three prepare students to work in art museums and one program prepares students for work in history museums.

Museum studies program chairs were asked if their programs were oriented toward preparing students for a variety of positions in museums, or if they were oriented toward a particular type of position. Twenty-eight programs (88%) prepare graduates for a variety of positions in museums while only two programs (6%) are oriented toward preparing graduates for work in specific types of positions. One of these programs is focused on exhibit design; the other on museum education.

Program chairs were asked to indicate the number of students who completed degrees or certificates in their programs in the 2009-2010 academic year by gender and race. Table 21 shows the average number of completions and percent of total completions in participating graduate museum studies programs by gender. The average number of completions was 14 ($SD=12.9$). Women made up the majority of students completing degrees or certificates in represented programs at 82% compared to men with 18%.

Table 21

Students who Completed Degrees or Certificates in Represented Graduate Museum Studies Programs by Gender (2009-10), Average and Percent of Total

	<i>M</i>	<i>SD</i>	<i>%</i>
Male	2.4	2.8	17.7
Female	11.3	12.1	82.3
Total Completions	13.8	12.9	100.0

Table 22 shows the average number of completions and percent of total completions in participating graduate museum studies programs by race. Non-Hispanic whites comprised the largest racial group for students completing degrees in represented programs at 77% compared to Hispanics at 8%, African-Americans at 6%, and “other” at 10%.

Table 22

Number of Students who Completed Degrees or Certificates in Represented Graduate Museum Studies Programs by Race (2009-10), Average and Percent of Total

	<i>M</i>	<i>SD</i>	<i>%</i>
Hispanic	1.0	1.4	7.7
Non-Hispanic White	10.3	12.4	77.0
African-American	0.8	2.0	5.8
Other	1.3	3.4	9.7
Total Completions	13.5	13.1	100.2

Museum studies program chairs provided data on faculty in their programs. Table 23 shows the average number of faculty by their status in the program (full-time, full-time shared, adjunct) and the percent of the total faculty by their status in the program. Represented programs more commonly utilize adjunct (part-time) faculty at 49% or full-time faculty shared with other departments (36%) over having their own full-time museum studies faculty. The average number of full-time museum studies faculty in represented programs is only 1.5 (*SD*=1.6), or 15%. The average number of overall faculty (combined statuses) in represented programs is 9.6 (*SD*=10.1).

Table 23

Number of Faculty in Represented Graduate Museum Studies Programs by Status in Program, Average and Percent of Total

	<i>M</i>	<i>SD</i>	<i>%</i>
Full-time museum studies faculty	1.5	1.6	15.3
Full-time faculty shared with other programs/ departments	3.4	9.5	35.5
Adjunct (part-time) faculty	4.7	5.4	49.2
Total	9.6	10.1	100.0

Note. Distinction between full-time and part-time faculty does not reflect tenure.

The average number of faculty in represented graduate museum studies programs by gender is presented in Table 24. More faculty in represented graduate museum studies programs are women (63%) than men (37%).

Table 24

Number of Faculty in Represented Graduate Museum Studies Programs by Gender, Average and Percent of Total

	<i>M</i>	<i>SD</i>	<i>%</i>
Male	3.2	4.2	36.7
Female	5.6	6.3	63.3
Total	8.8	10.1	100.0

The average number of faculty in represented graduate museum studies programs by race is presented in Table 25. Non-Hispanic Whites make up the majority of faculty in represented graduate museum studies programs at 82% compared with African-Americans at 5%, Hispanics at 3%, and “other” at 11%.

Table 25

Number of Faculty in Represented Graduate Museum Studies Programs by Race, Average and Percent of Total

	<i>M</i>	<i>SD</i>	<i>%</i>
Hispanic	0.2	0.5	2.5
Non-Hispanic White	6.0	5.9	81.4
African-American	0.3	1.4	4.6
Other	0.8	2.4	11.4
Total	7.4	6.0	99.9

Museum studies program chairs were asked to report the number of faculty in their program who have experience working in a museum. The average number of faculty within a program with experience working in a museum is 5.6 ($SD=4.6$) out of an average faculty size of 9.6 ($SD=10.1$).

Rating of Competencies

Central to this study is the rating of the 65 competencies adapted from the International Council of Museums International Committee on the Training of Personnel (ICOM-ICTOP) *Curricula Guidelines for Museum Professional Development* (2010) by the museum studies program chairs and museum leaders. As described in Chapter 3, because an ordinal rating scale was used with meanings assigned to the points on the scale, analysis of means and standard deviations are not valid, but medians are appropriate (Stevens, 1946). Following are the points used on the rating scale:

1-No knowledge or ability

2-Basic level of knowledge or ability: able to perform tasks related to this competency with supervision.

3-Moderate level of knowledge or ability: able to perform tasks related to this competency with very little supervision.

4-High level of knowledge or ability: able to perform tasks related to this competency without supervision.

5-Expert level of knowledge or ability: able to lead and supervise others in tasks related to this competency.

Rating of General Competencies

Table 26 shows the median scores for the 12 general competencies for both groups, the difference in medians, the Mann-Whitney U test statistic (U), the standardized test statistic (z), and the size of effect (r). Figure 2 graphically illustrates the median scores by group for each competency. Among museum leaders, the highest rated general competencies were interpersonal relationships ($MD=4.0$, high level of knowledge or ability) and professionalism ($MD=4.0$). Eight general competencies were rated by museum leaders with a median score of 3.0, indicating a moderate level of knowledge or ability necessary for entry-level museum professionals. These were: communications, financial management, information technology, museums and society, nature of work, project management, research and resources in the field.

Among program chairs, the highest rated general competencies were museums and society ($MD=5.0$, expert level of knowledge or ability), interpersonal relationships ($MD=4.5$), and nature of work ($MD=4.5$), the latter two with median scores indicating a level of knowledge or ability between moderate and expert. The remaining general competencies all received a median score of at least 3.0 by program chairs

A Mann-Whitney U test evaluated the difference in the responses between the two groups in the rating of each general competency. The test showed a statistically significant difference ($p < .05$) in responses by museum leaders and program chairs for all general competencies except financial management, $z=1.00$, $p > .05$, and information technology, $z=.84$, $p > .05$. As seen in Table 26, the difference in median scores was large for three of the general competencies: museums and society ($r=.62$), nature of work ($r=.66$), and resources in the field ($r=.52$). A small effect size was found for financial management ($r=.12$) and information technology ($r=.10$).

Table 26
Median Scores for General Competencies

	Museum Leaders	Program Chairs	Difference	<i>U</i>	<i>z</i>	<i>r</i>	Effect Size
Communications	3.0	4.0	1.0	834.00	2.90	.35	moderate
Environmentalism and its Impact	2.0	3.0	1.0	655.00	2.49	.30	moderate
Evaluation Methods	2.5	3.0	0.5	866.00	3.25	.39	moderate
Financial Management	3.0	3.0	0.0	610.00	1.00	.12	small
Information Technology	3.0	3.0	0.0	637.00	.84	.10	small
Interpersonal Relationships	4.0	4.5	0.5	859.00	3.42	.41	moderate
Museums and Society	3.0	5.0	2.0	1034.50	5.23	.62	large
Nature of Work	3.0	4.5	1.5	1063.50	5.54	.66	large
Professionalism	4.0	4.0	0.0	891.00	3.55	.42	moderate
Project Management	3.0	4.0	1.0	886.00	3.44	.41	moderate
Research	3.0	4.0	1.0	926.50	3.97	.47	moderate
Resources in the Field	3.0	4.0	1.0	914.50	4.38	.52	large

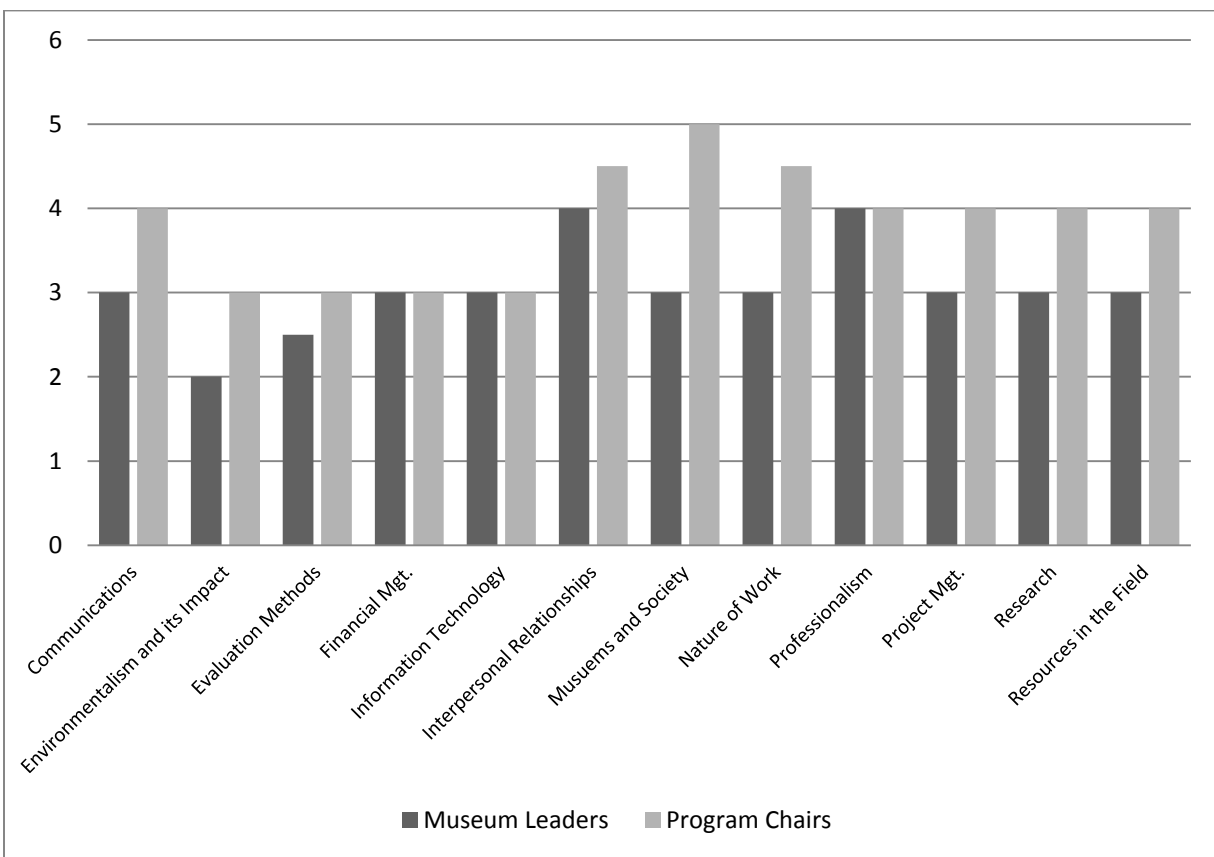


Figure 2. Median scores for general competencies.

Figures 3-14 present the frequencies of responses by groups for each of the 12 general competencies.

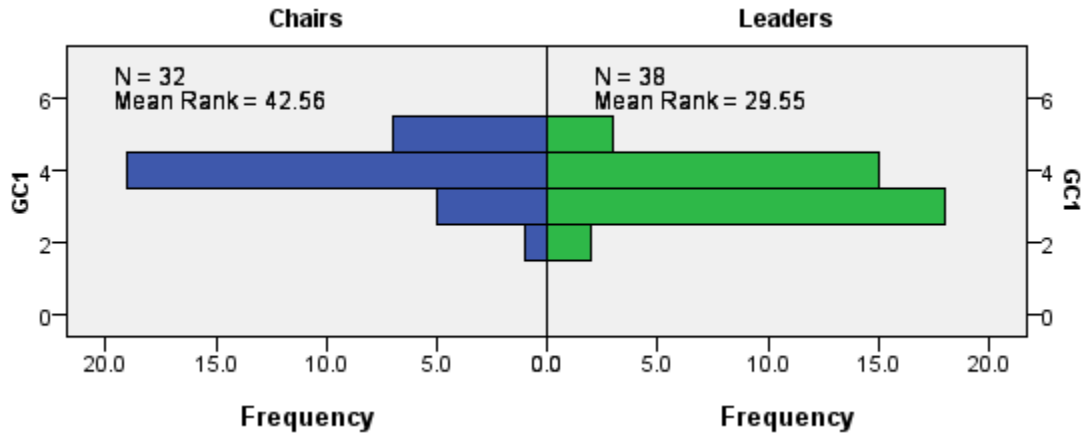


Figure 3. Frequency of responses by groups for general competency 1: communications. ($U=834.00$, $z=2.90$, $p=.004$, $r=.35$)

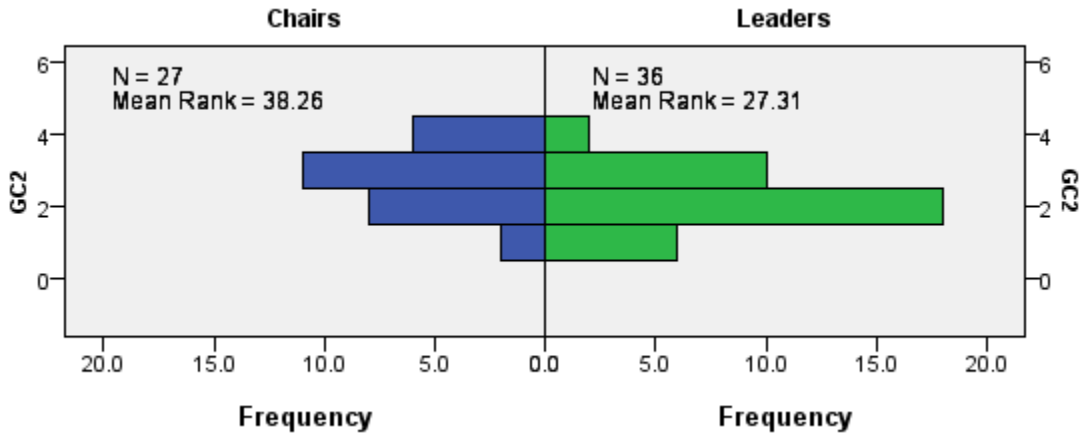


Figure 4. Frequency of responses by groups for general competency 2: environmentalism and its impact. ($U=655.00$, $z=2.49$, $p=.013$, $r=.30$)

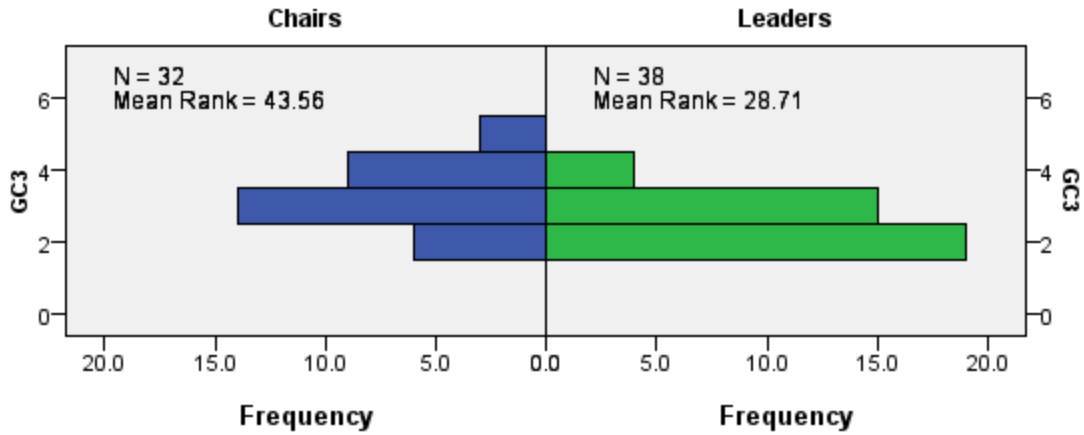


Figure 5. Frequency of responses by groups for general competency 3: evaluation methods. ($U=866.00$, $z=3.25$, $p=.001$, $r=.39$)

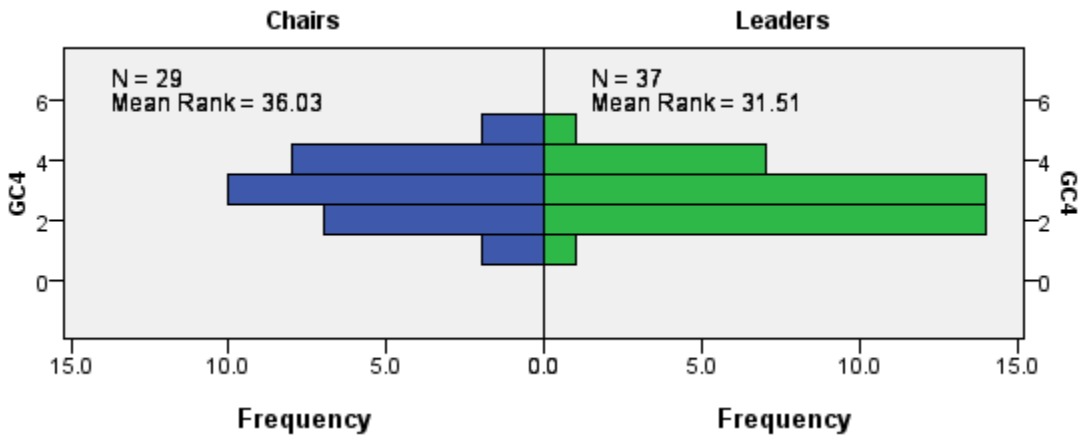


Figure 6. Frequency of responses by groups for general competency 4: financial management. ($U=610.00$, $z=1.00$, $p=.319$, $r=.12$)

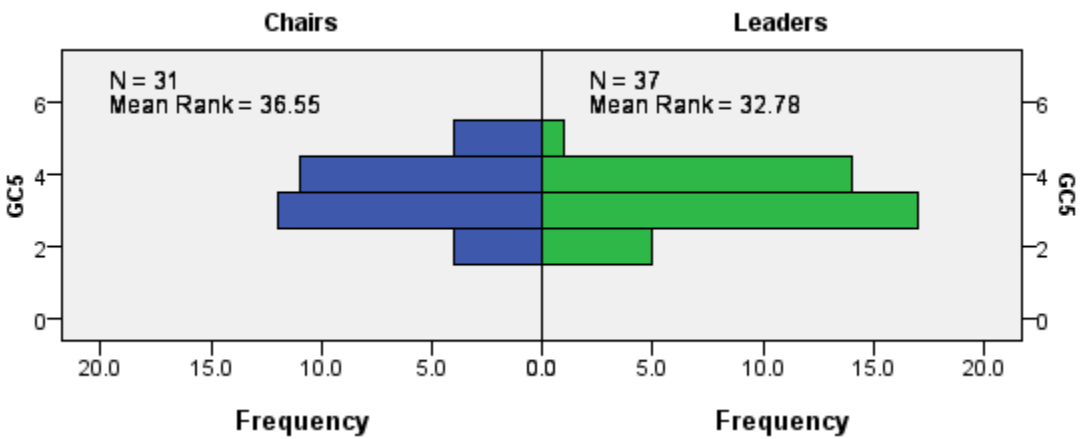


Figure 7. Frequency of responses by groups for general competency 5: information technology. ($U=637.00$, $z=.84$, $p=.402$, $r=.10$)

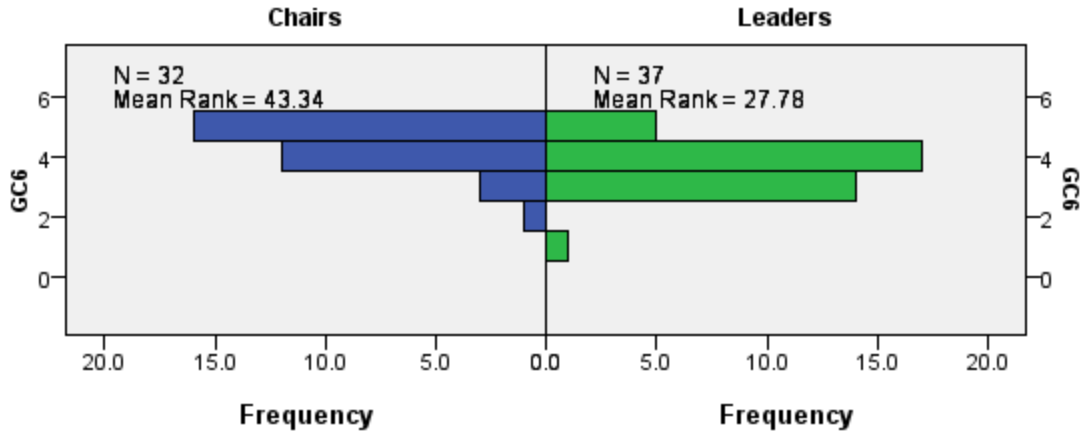


Figure 8. Frequency of responses by groups for general competency 6: interpersonal relationships. ($U=859.00$, $z=3.42$, $p=.001$, $r=.41$)

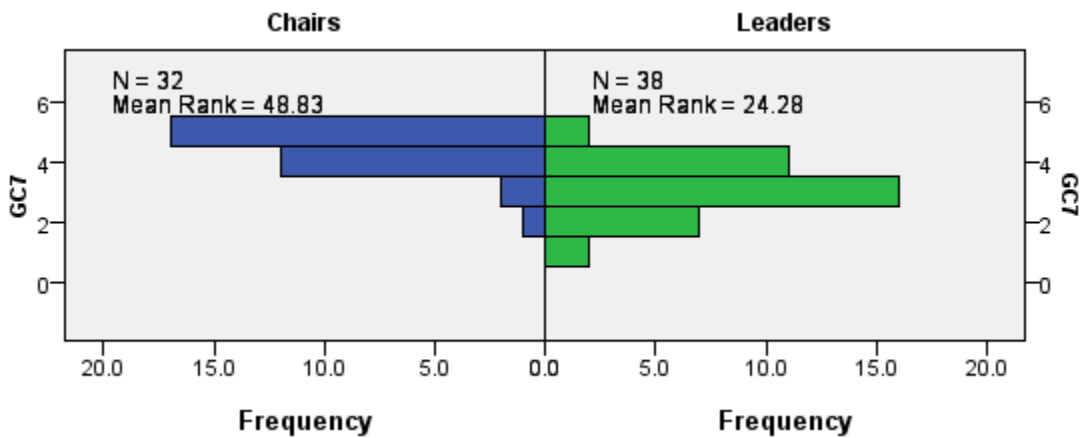


Figure 9. Frequency of responses by groups for general competency 7: museums and society. ($U=1034.50$, $z=5.23$, $p=.000$, $r=.62$)

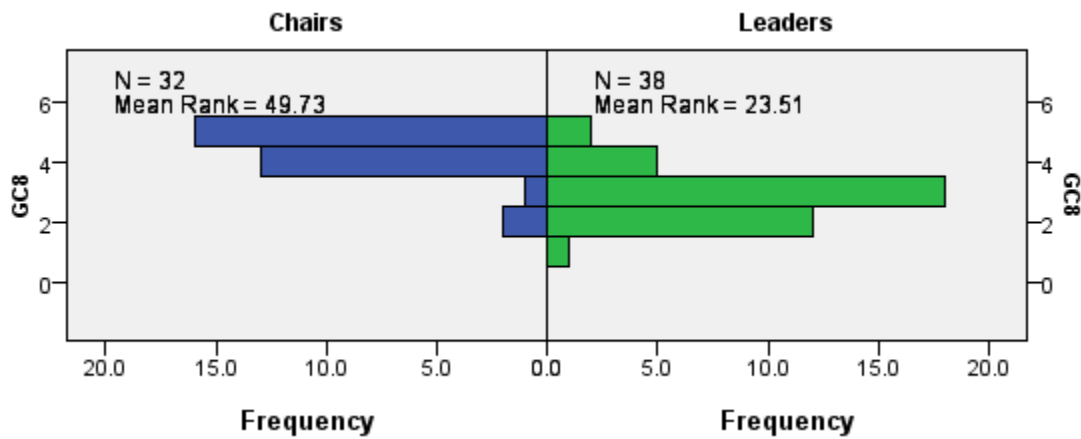


Figure 10. Frequency of responses by groups for general competency 8: nature of work. ($U=1063.50$, $z=5.54$, $p=.000$, $r=.66$)

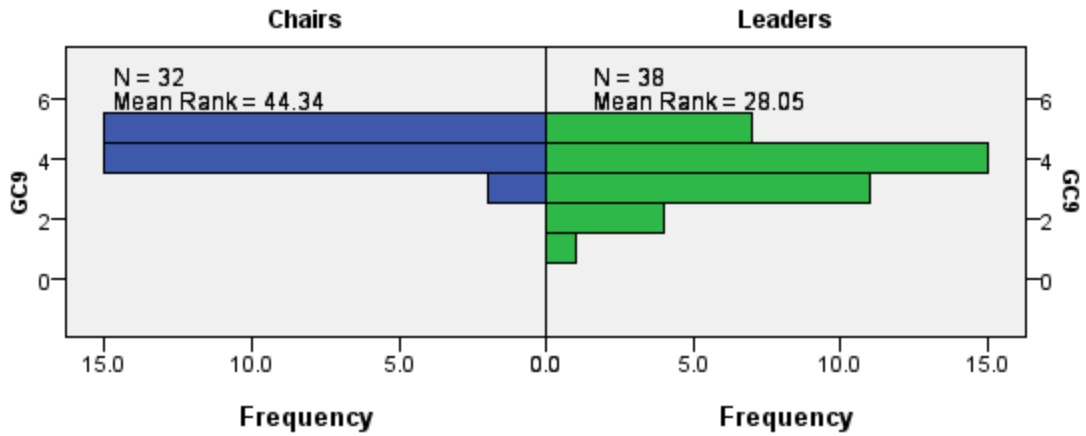


Figure 11. Frequency of responses by groups for general competency 9: professionalism. ($U=891.00$, $z=3.55$, $p=.000$, $r=.42$)

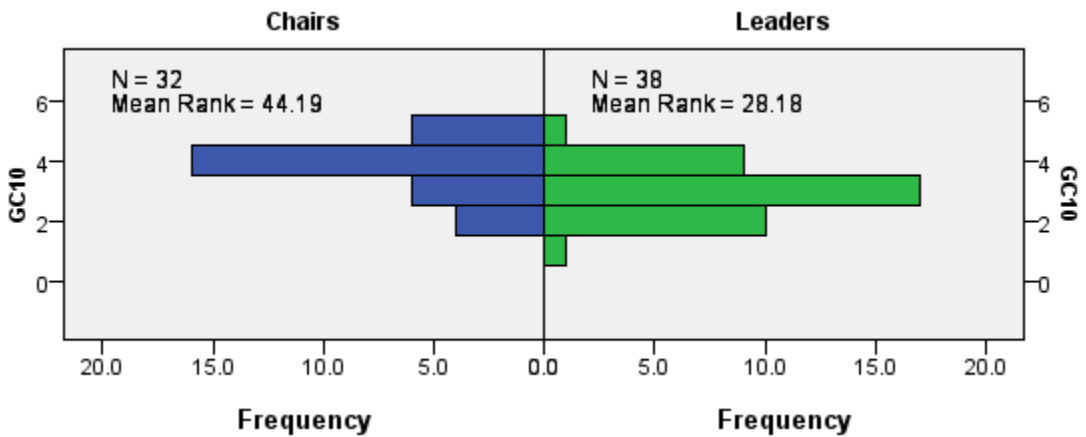


Figure 12. Frequency of responses by groups for general competency 10: project management. ($U=886.00$, $z=3.44$, $p=.001$, $r=.41$)

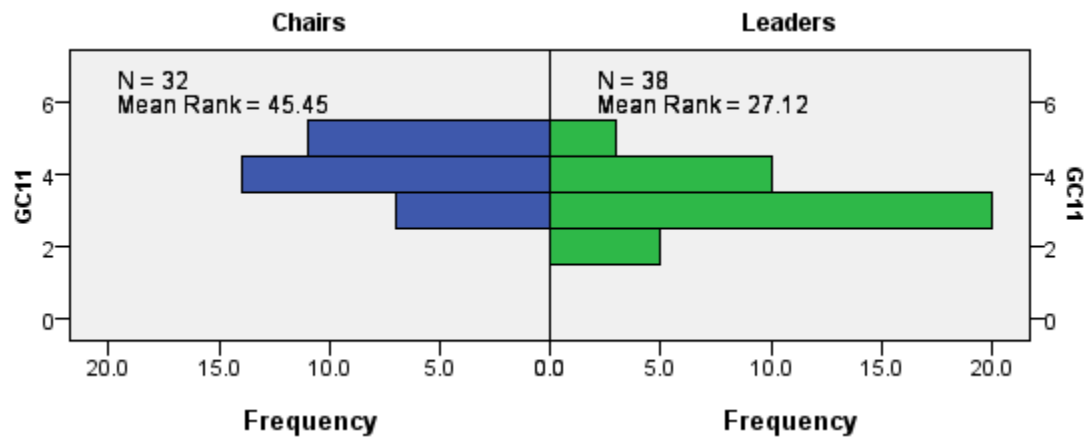


Figure 13. Frequency of responses by groups for general competency 11: research. ($U=926.50$, $z=3.97$, $p=.000$, $r=.47$)

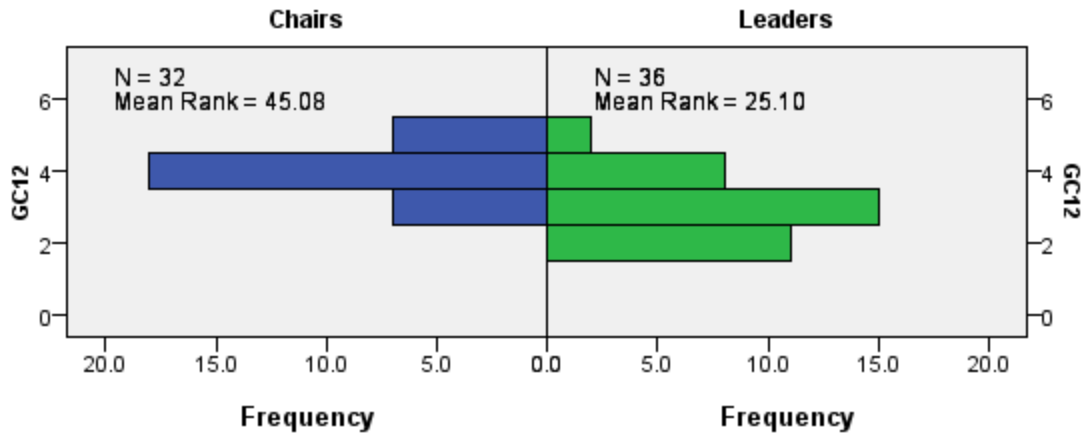


Figure 14. Frequency of responses by groups for general competency 12: resources in the field. ($U=914.50$, $z=4.38$, $p=.000$, $r=.52$)

Rating of Museology Competencies

Table 27 shows the median scores for the seven museology competencies for both groups, the difference in medians, the Mann-Whitney U test statistic (U), the standardized test statistic (z), and the size of effect (r). The highest rated competencies in this category by museum leaders, all with median scores of three, indicating a moderate level of knowledge or ability necessary for entry-level museum professionals, were: community museology, roles and functions of museums, vision, and issues in museum practice. Program chairs rated five of the seven museology competencies with a median score of four, indicating a high level of knowledge or ability reached by students through their curricula. These high ranking competencies were: community museology, development of the museum profession, roles and functions of museums, vision, and issues in museum practice.

A Mann-Whitney U test evaluated the difference in the responses between the two groups in the rating of each museology competency. The test showed a statistically significant difference ($p<.05$) in responses by museum leaders and program chairs for all seven museology competencies. As seen in Table 27, the difference in median scores was large for five of the seven museology competencies: community museology ($r=.53$), development of the museum

profession ($r=.66$), roles and functions of museums ($r=.59$), vision ($r=.55$), and issues in museum practice ($r=.71$). At least a moderate effect size was shown for all of the museology competencies.

Table 27.
Median Scores for Museology Competencies

	Museum Leaders	Program Chairs	Difference	<i>U</i>	<i>z</i>	<i>r</i>	Effect Size
Community Museology	3.0	4.0	1.0	965.00	4.46	.53	large
Development of the Museum Profession	2.0	4.0	2.0	1026.50	5.48	.66	large
Roles and Functions of Museums	3.0	4.0	1.0	745.00	4.92	.59	large
Vision	3.0	4.0	1.0	910.00	4.58	.55	large
Governance	2.0	3.0	1.0	850.00	3.56	.43	moderate
Issues in Museum Practice	3.0	4.0	1.0	1092.50	5.90	.71	large
Legal Context for Practice	2.0	3.5	1.5	887.50	4.09	.49	moderate

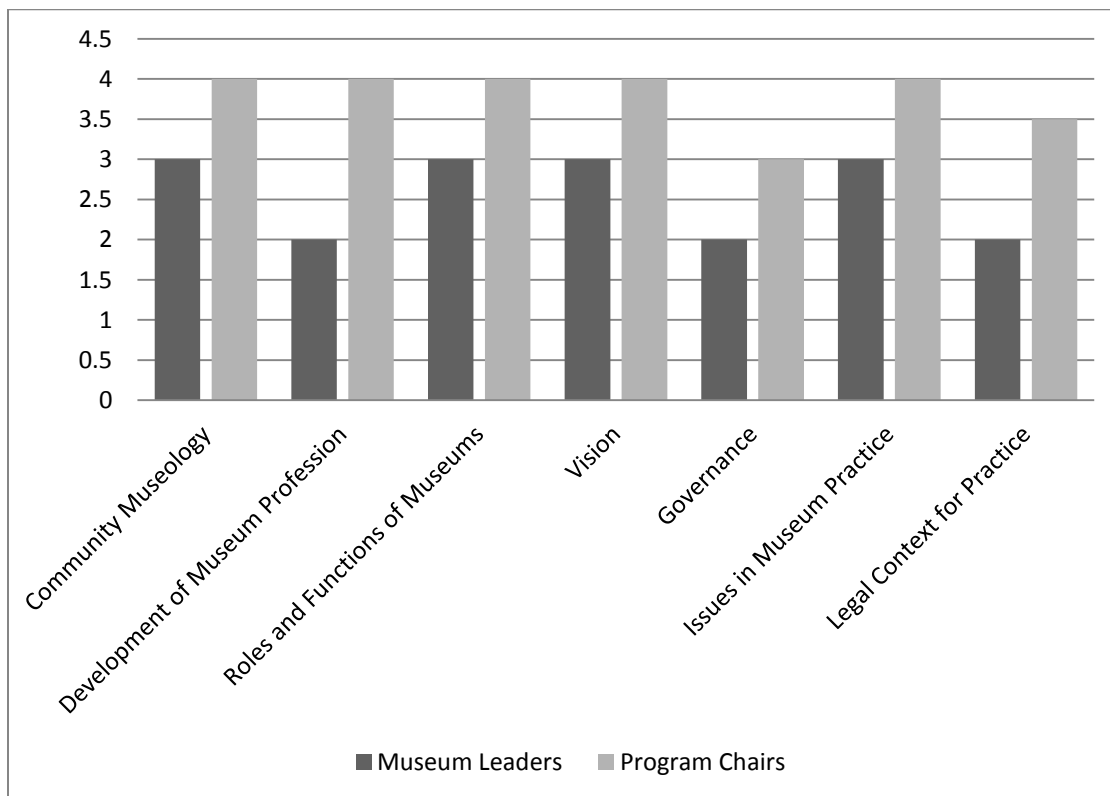


Figure 15 . Median scores for museology competencies.

Figures 16-22 present the frequencies of responses by groups for each of the seven museology competencies.

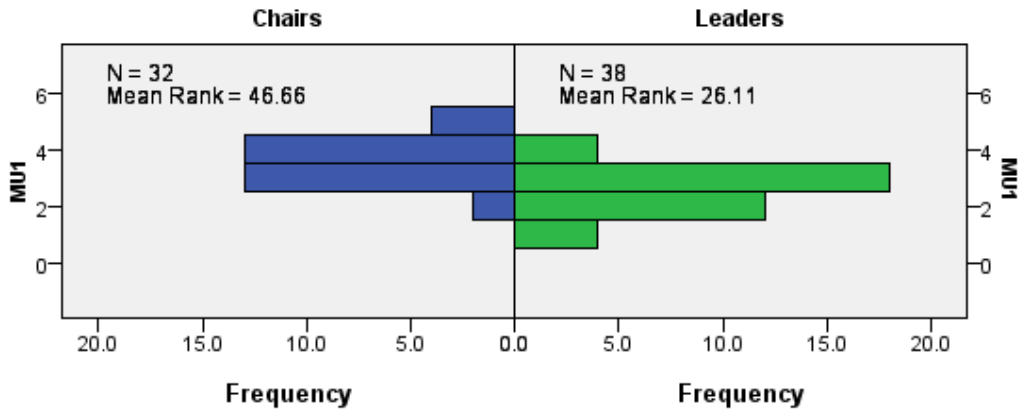


Figure 16. Frequency of responses by groups for museology competency 1: community museology. ($U=965.00$, $z=4.46$, $p=.000$, $r=.53$)

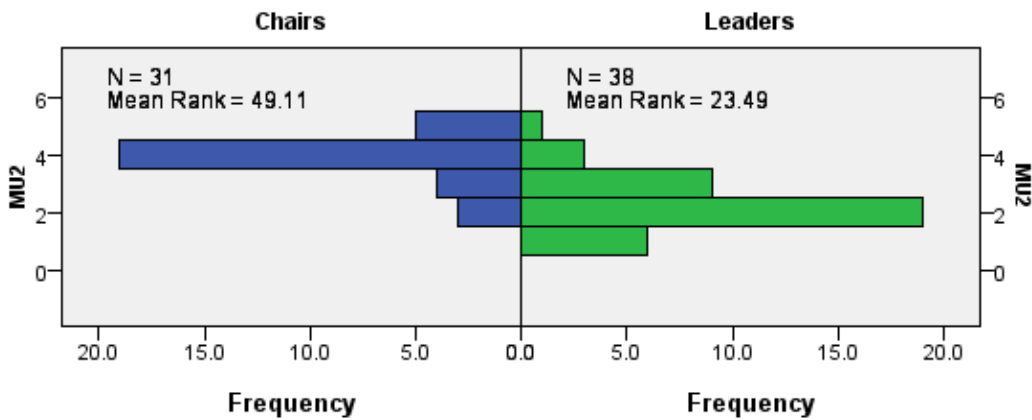


Figure 17. Frequency of responses by groups for museology competency 2: development of the museum profession. ($U=1026.50$, $z=5.48$, $p=.000$, $r=.66$)

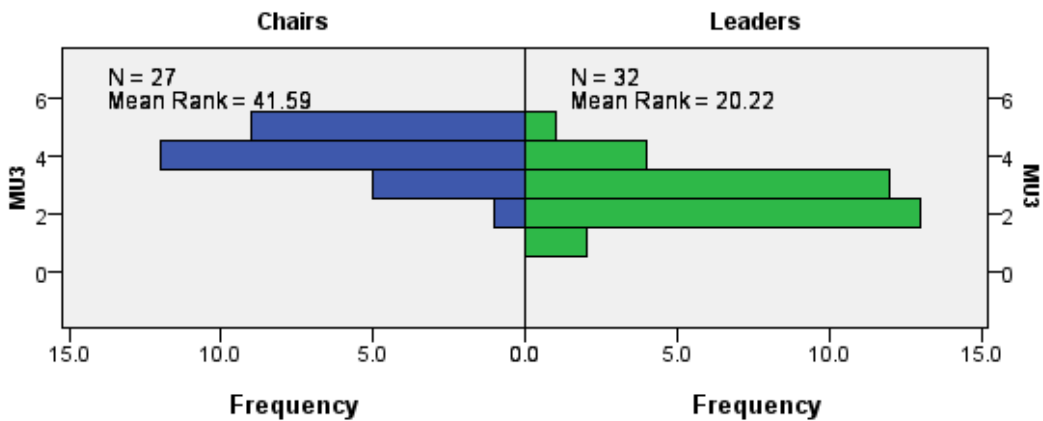


Figure 18. Frequency of responses by groups for museology competency 3: roles and functions of museums. ($U=745.00$, $z=4.93$, $p=.000$, $r=.59$)

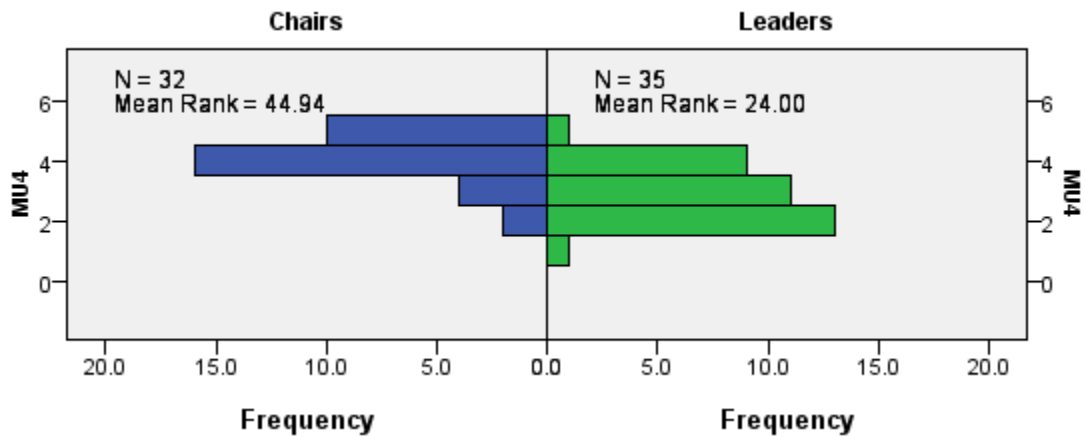


Figure 19. Frequency of responses by groups for museology competency 4: vision. ($U=910.00$, $z=4.58$, $p=.000$, $r=.55$)

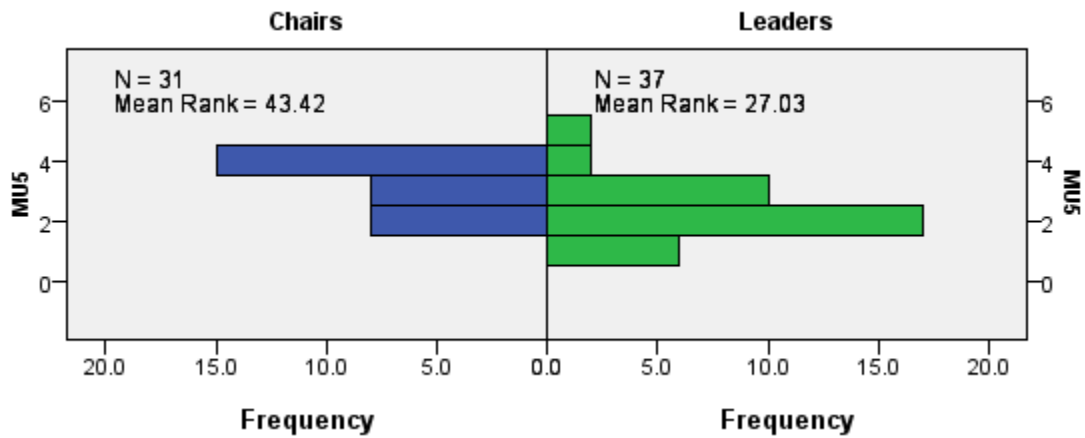


Figure 20. Frequency of responses by groups for museology competency 5: governance. ($U=850.00$, $z=3.56$, $p=.000$, $r=.43$)

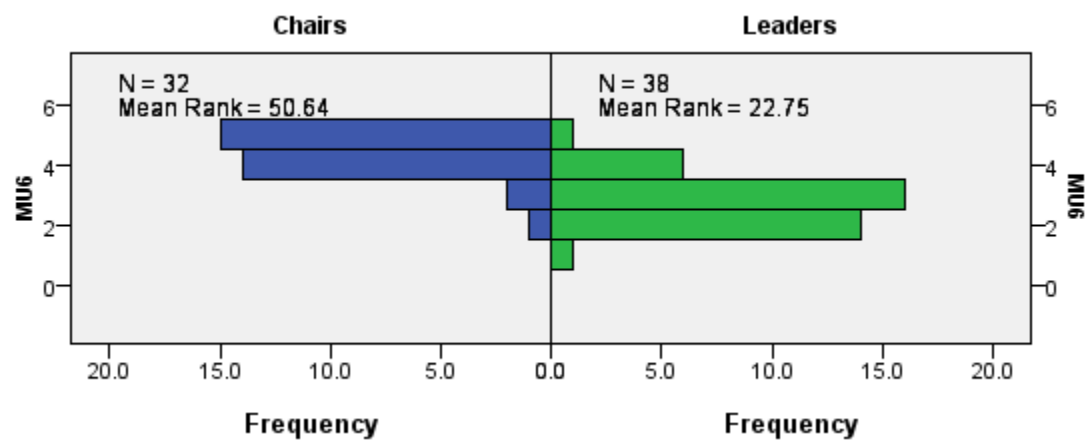


Figure 21. Frequency of responses by groups for museology competency 6: issues in museum practice. ($U=1092.50$, $z=5.90$, $p=.000$, $r=.71$)

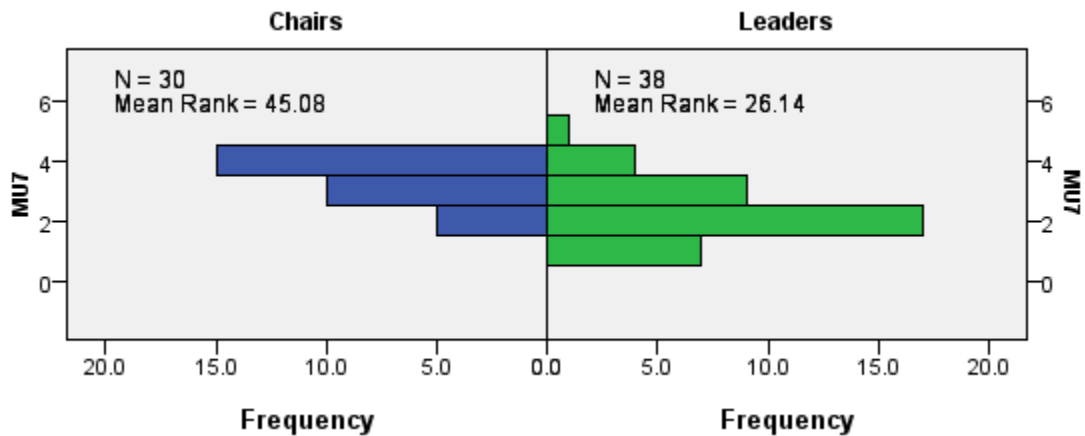


Figure 22. Frequency of responses by groups for museumology competency 7: legal context for practice. ($U=887.50$, $z=4.09$, $p=.000$, $r=.49$)

Rating of Management Competencies

Table 28 shows the median scores for the 19 management competencies for both groups, the difference in medians, the Mann-Whitney U test statistic (U), the standardized test statistic (z), and the size of effect (r). Among museum leaders, the highest rated management competencies were community relations ($MD=3.0$, moderate level of knowledge or ability) and information management ($MD=3.0$). The median score for museum leaders for all of the remaining management competencies was 2.0, indicating a basic level of knowledge or ability is necessary for entry-level museum professionals. Program chairs also rated community relations ($MD=4.0$) and information management ($MD=4.0$) highest, as well as formal organizational structure ($MD=4.0$). Programs chairs rated physical plant and site management lowest ($MD=2.0$, basic level of knowledge or ability).

A Mann-Whitney U test evaluated the difference in the responses between the two groups in the rating of each of the 19 management competencies. The test showed a statistically significant difference ($p<.05$) in responses by museum leaders and program chairs for all management competencies except information management, $z=1.62$, $p>.05$, and physical plant

and site management, $z=1.41$, $p>.05$. As seen in Table 28, the difference in median scores was large for three of the management competencies: architecture ($r=.51$), community relations ($r=.55$), and formal organizational structure ($r=.59$). The difference in medians was small for six of the management competencies: business and operational management ($r=.28$), financial planning and management ($r=.24$), human resource planning and management ($r=.28$), information management ($r=.19$), physical plant and site management ($r=.17$), and media relations ($r=.26$).

Table 28
Median Scores for Management Competencies

	Museum Leaders	Program Chairs	Difference	<i>U</i>	<i>z</i>	<i>r</i>	Effect Size
Accreditation	2.0	3.0	1.0	849.00	3.98	.48	moderate
Advisory Bodies	2.0	3.0	1.0	877.50	3.64	.44	moderate
Architecture	2.0	3.0	1.0	817.50	4.26	.51	large
Business/Operational Management	2.0	3.0	1.0	752.00	2.38	.28	small
Community Relations	3.0	4.0	1.0	1424.50	4.62	.55	large
Financial Planning and Management	2.0	3.0	1.0	683.00	1.98	.24	small
Formal Organizational Structure	2.0	4.0	2.0	1007.50	4.96	.59	large
Fund Raising and Grant Development	2.0	3.0	1.0	807.00	3.03	.36	moderate
Human Resource Planning and Mgt.	2.0	3.0	1.0	673.00	2.35	.28	small
Income Producing Activities (concessions, fees, retail operations)	2.0	3.0	1.0	725.50	3.01	.36	moderate
Information Management	3.0	4.0	1.0	676.50	1.62	.19	small
Insurance/Indemnity	2.0	3.0	1.0	632.00	3.09	.37	moderate
Law	2.0	3.0	1.0	773.50	2.99	.36	moderate
Marketing	2.0	3.0	1.0	923.50	3.93	.47	moderate
Memberships/"Friends" Organizations	2.0	3.0	1.0	840.50	3.57	.43	moderate
Physical Plant and Site Management	2.0	2.0	0.0	597.50	1.41	.17	small
Public Affairs	2.0	3.0	1.0	777.50	2.99	.36	moderate
Media Relations	2.0	3.0	1.0	721.00	2.20	.26	small
Organizational Theory	2.0	3.0	1.0	835.00	3.41	.41	moderate

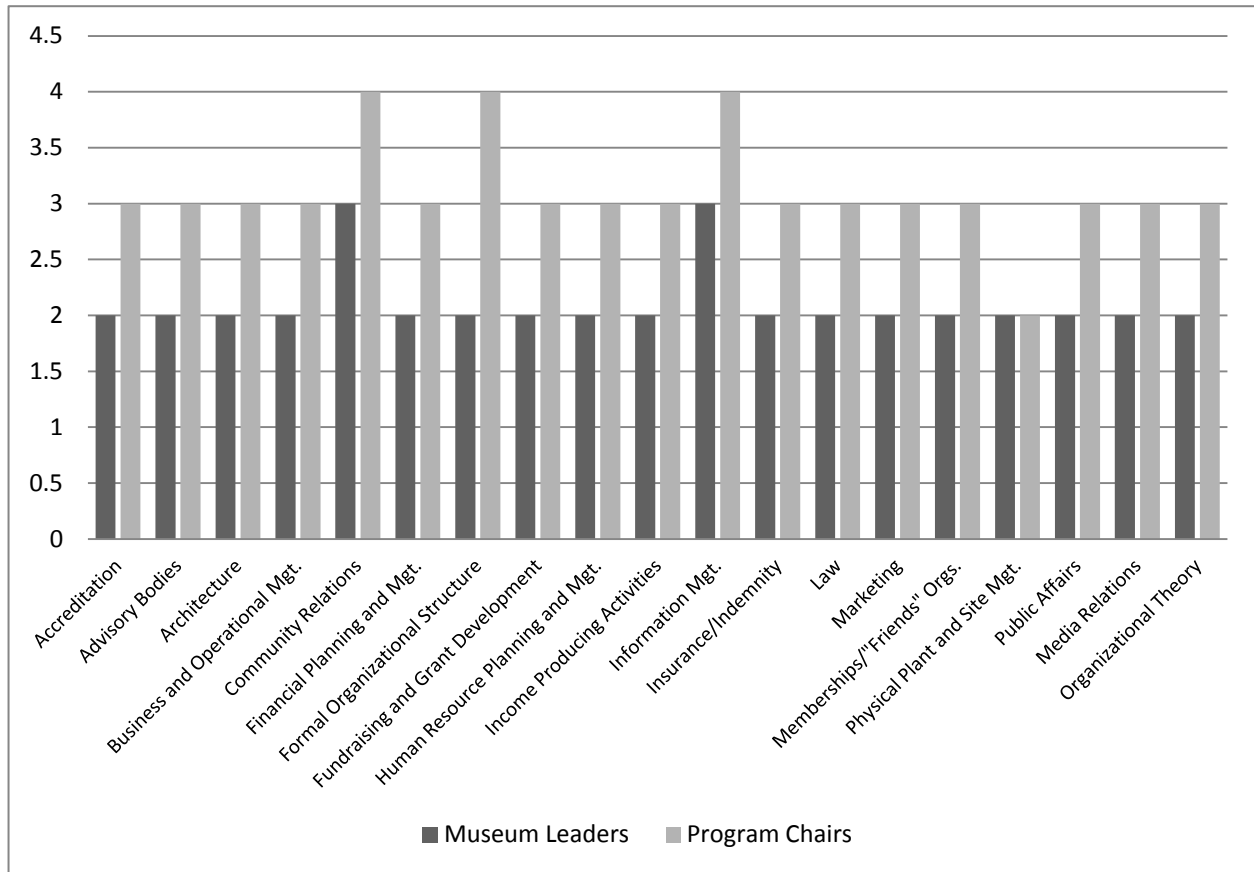


Figure 23. Median scores for management competencies.

Figures 24-42 present the frequencies of responses by groups for each of the 19 management competencies.

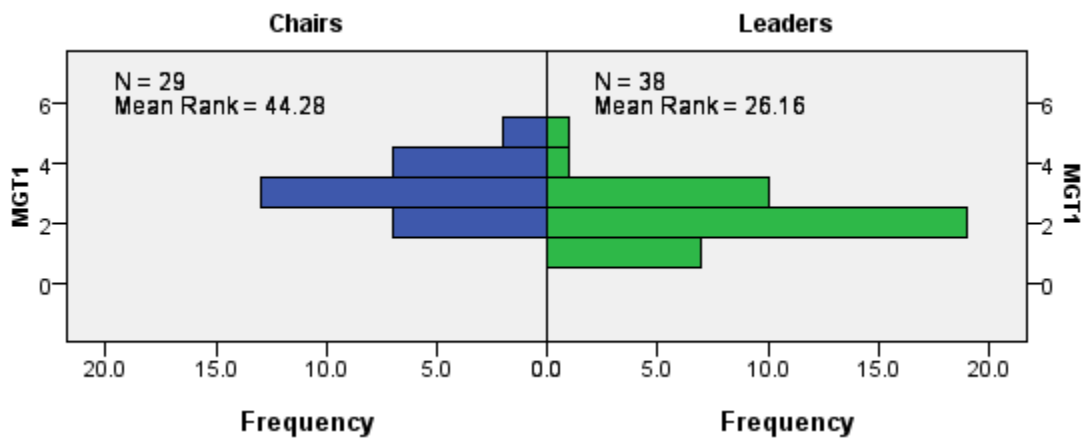


Figure 24. Frequency of responses by groups for management competency 1: accreditation. ($U=849.00$, $z=3.98$, $p=.000$, $r=.48$)

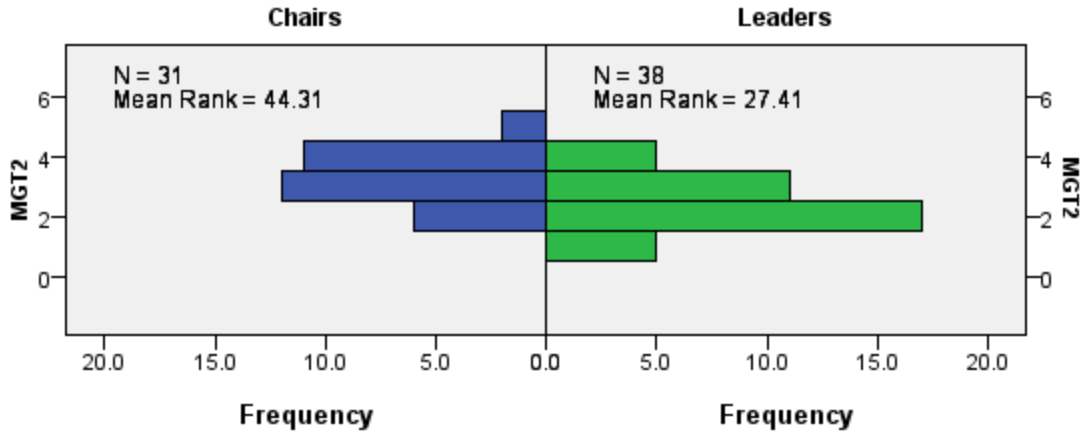


Figure 25. Frequency of responses by groups for management competency 2: advisory boards. ($U=877.50$, $z=3.64$, $p=.000$, $r=.44$)

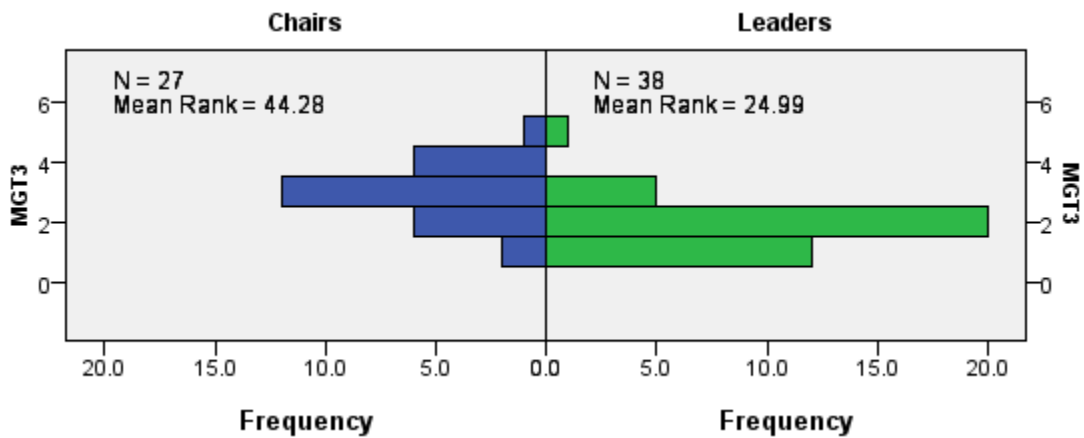


Figure 26. Frequency of responses by groups for management competency 3: architecture. ($U=817.50$, $z=4.26$, $p=.000$, $r=.51$)

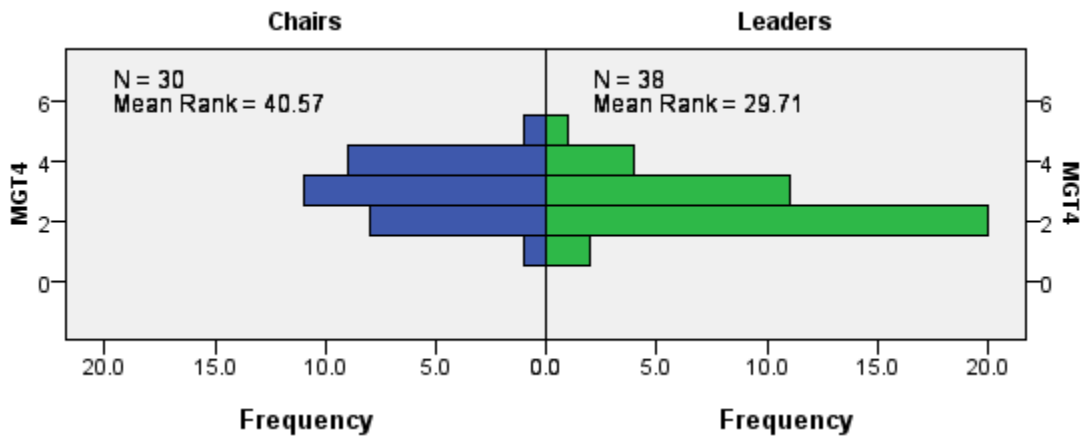


Figure 27. Frequency of responses by groups for management competency 4: business and operational management. ($U=752.00$, $z=2.38$, $p=.017$, $r=.28$)

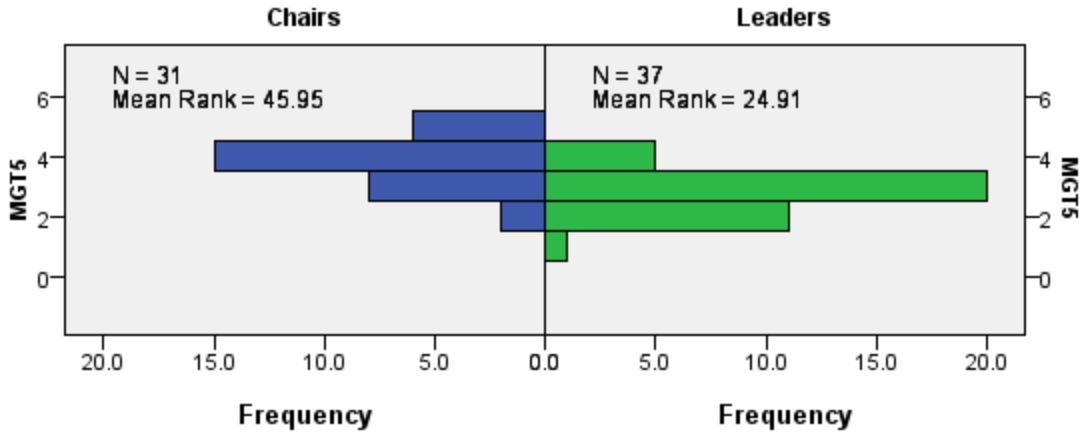


Figure 28. Frequency of responses by groups for management competency 5: community relations. ($U=1424.50$, $z=4.62$, $p=.000$, $r=.55$)

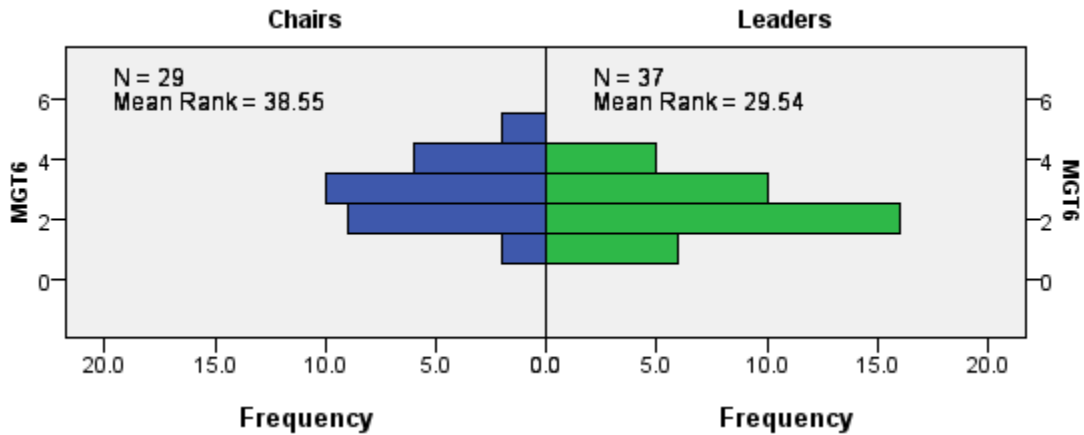


Figure 29. Frequency of responses by groups for management competency 6: financial planning and management. ($U=683.00$, $z=1.98$, $p=.047$, $r=.24$)

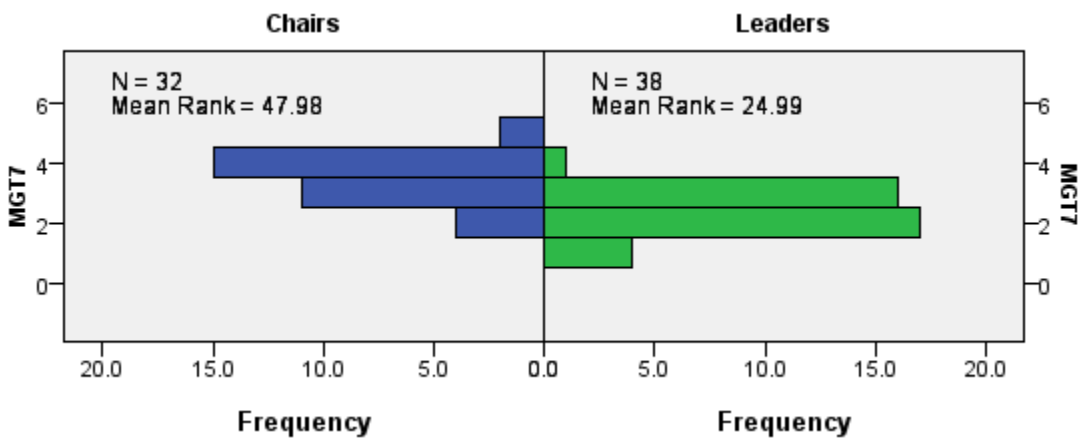


Figure 30. Frequency of responses by groups for management competency 7: formal organizational structure. ($U=1007.50$, $z=4.96$, $p=.000$, $r=.59$)

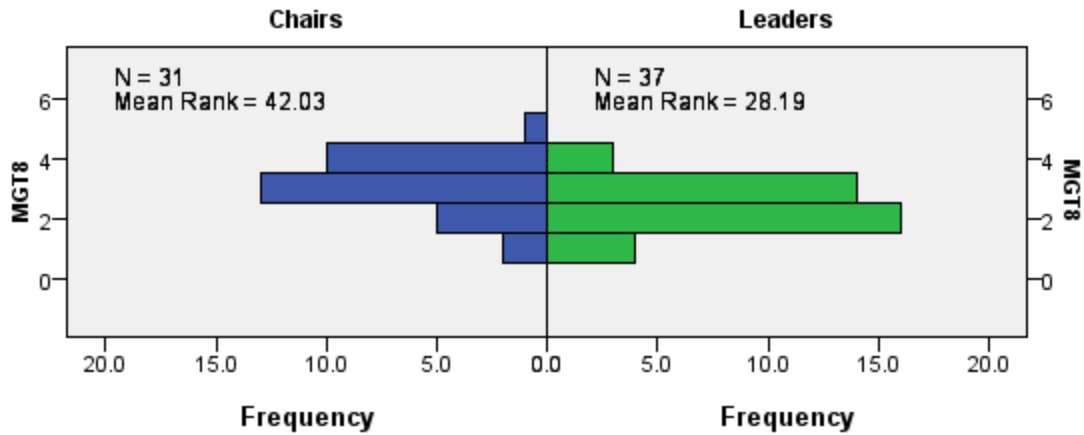


Figure 31. Frequency of responses by groups for management competency 8: fund raising and grant development. ($U=807.00$, $z=3.03$, $p=.002$, $r=.36$)

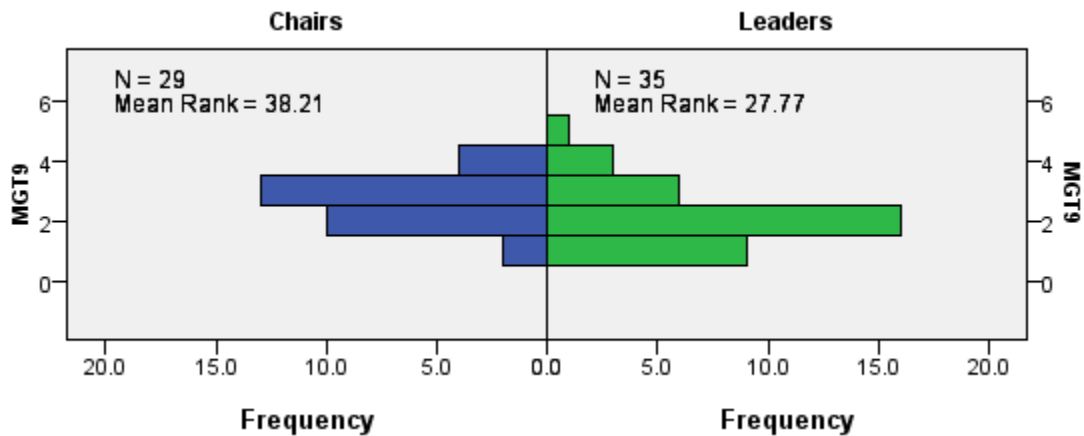


Figure 32. Frequency of responses by groups for management competency 9: human resource planning and management. ($U=673.00$, $z=2.35$, $p=.019$, $r=.28$)

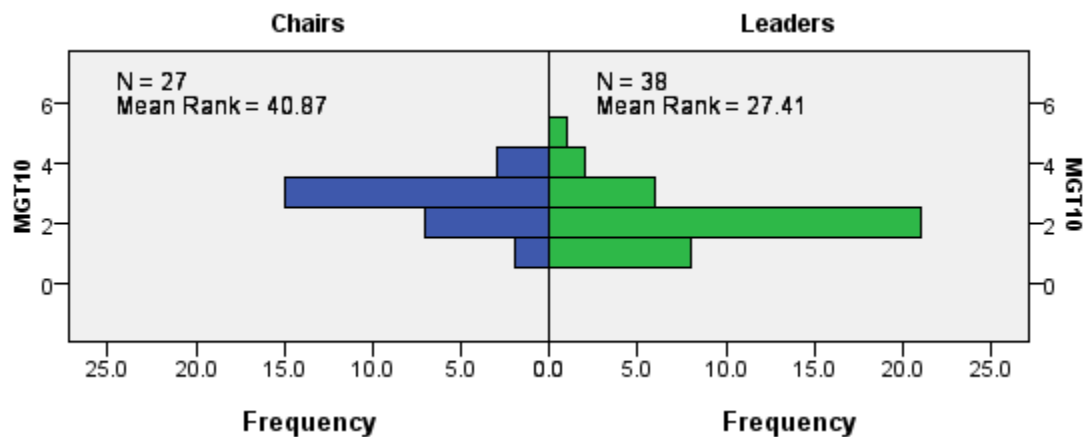


Figure 33. Frequency of responses by groups for management competency 10: income producing activities. ($U=725.50$, $z=3.01$, $p=.003$, $r=.36$)

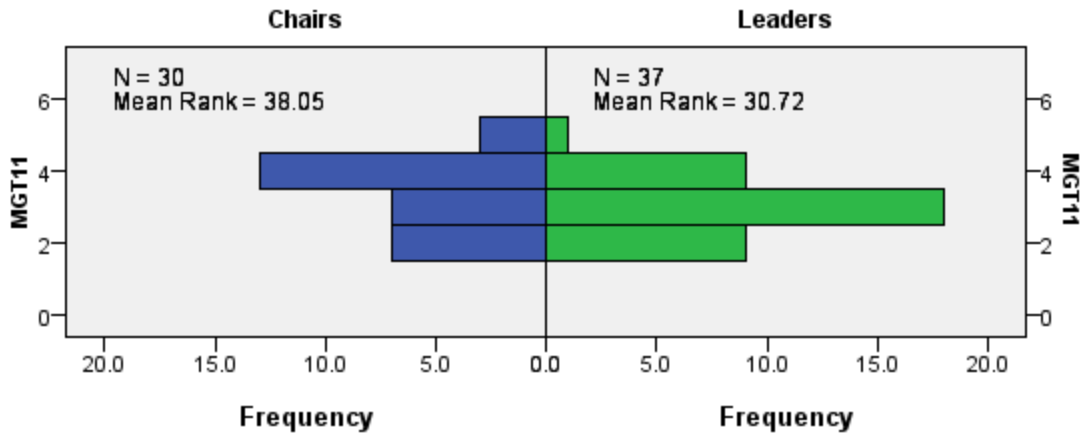


Figure 34. Frequency of responses by groups for management competency 11: information management. ($U=676.50$, $z=1.62$, $p=.106$, $r=.19$)

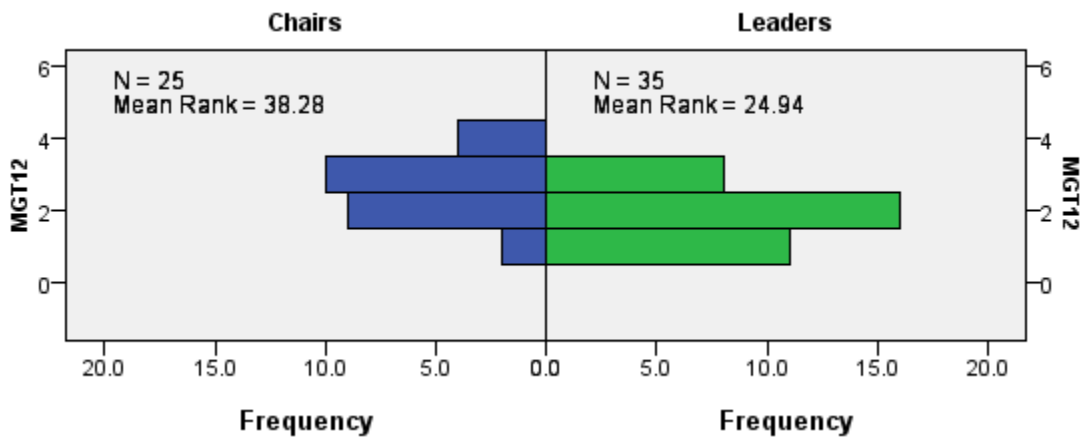


Figure 35. Frequency of responses by groups for management competency 12: insurance/indemnity. ($U=632.00$, $z=3.09$, $p=.002$, $r=.37$)

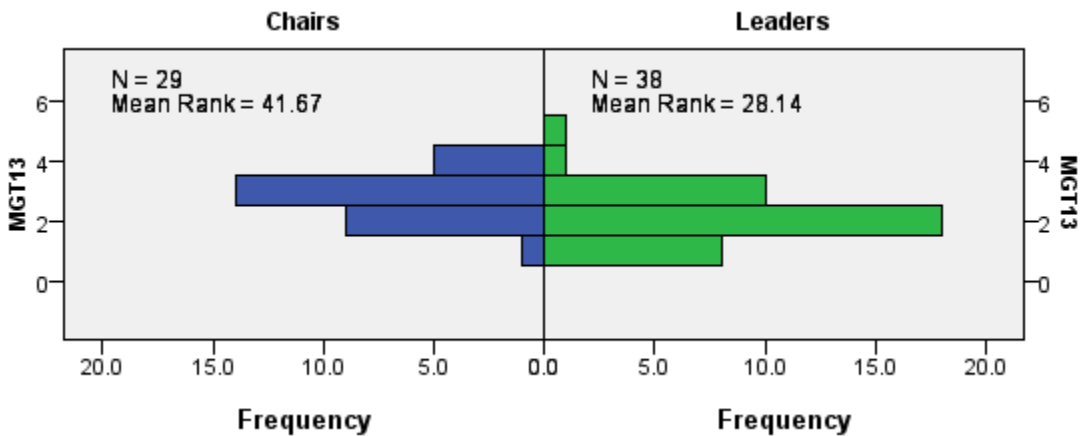


Figure 36. Frequency of responses by groups for management competency 13: law. ($U=773.50$, $z=2.99$, $p=.003$, $r=.36$)

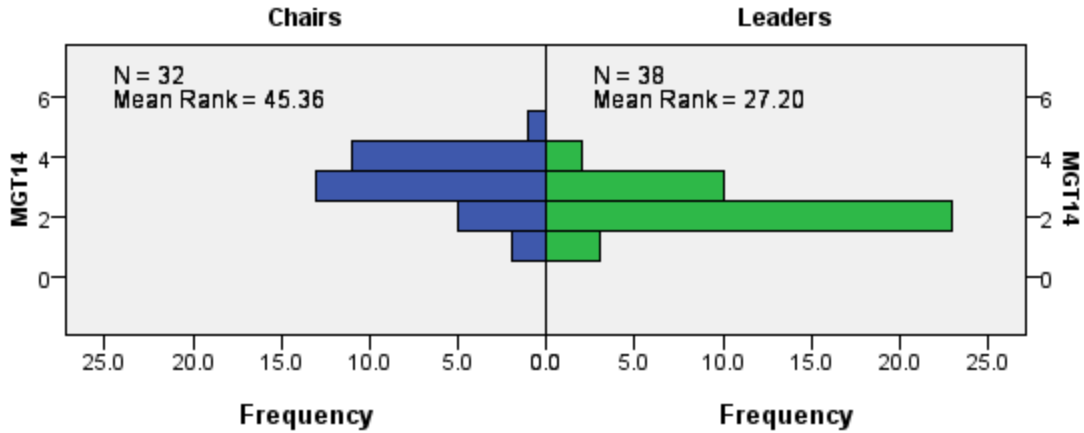


Figure 37. Frequency of responses by groups for management competency 14: marketing. ($U=923.50$, $z=3.93$, $p=.000$, $r=.47$)

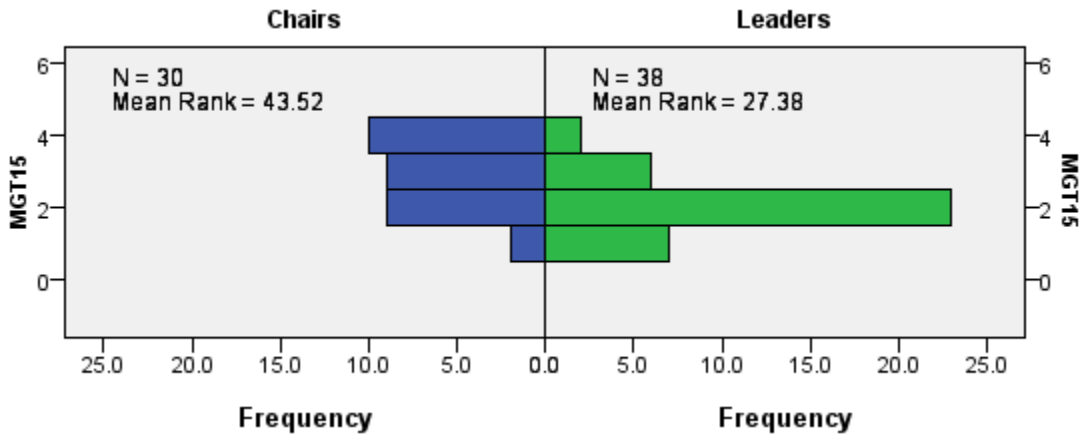


Figure 38. Frequency of responses by groups for management competency 15: memberships/“friends” organizations. ($U=840.50$, $z=3.57$, $p=.000$, $r=.43$)

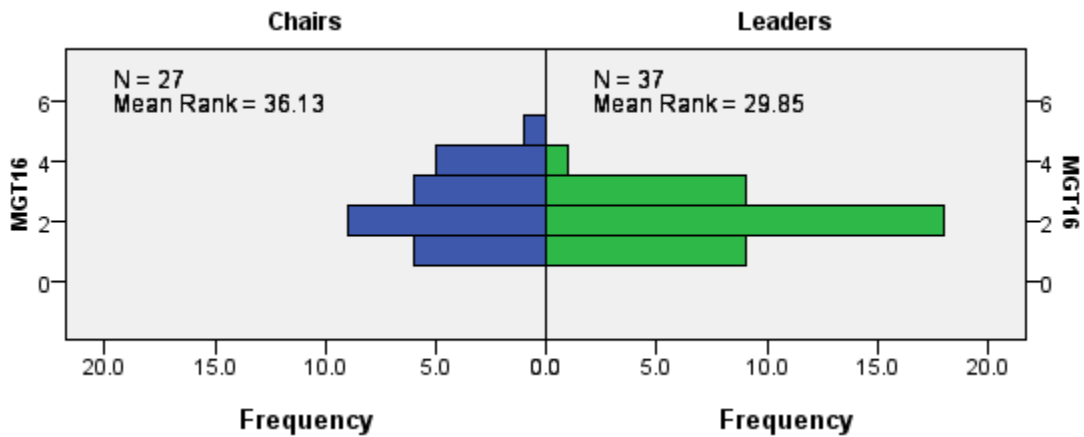


Figure 39. Frequency of responses by groups for management competency 16: physical plant and site management. ($U=597.50$, $z=1.41$, $p=.160$, $r=.17$)

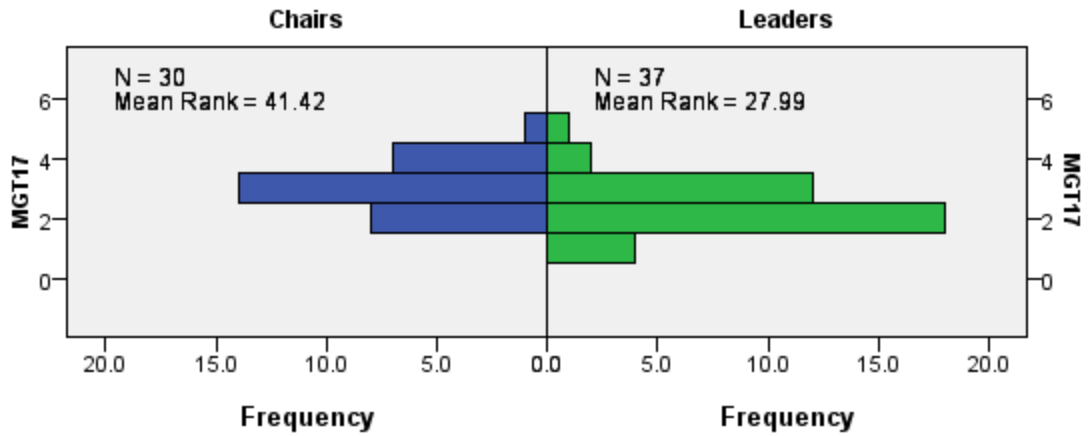


Figure 40. Frequency of responses by groups for management competency 17: public affairs. ($U=777.50$, $z=2.99$, $p=.003$, $r=.36$)

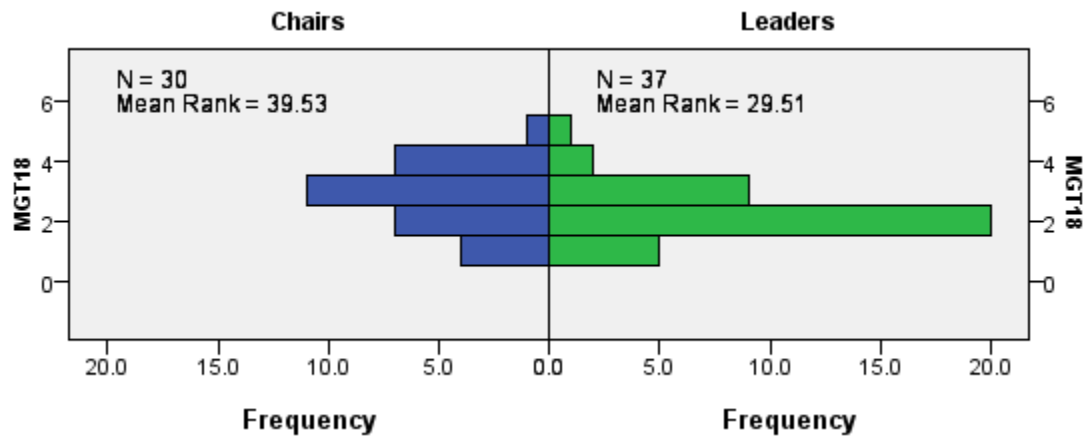


Figure 41. Frequency of responses by groups for management competency 18: media relations. ($U=721.00$, $z=2.20$, $p=.028$, $r=.26$)

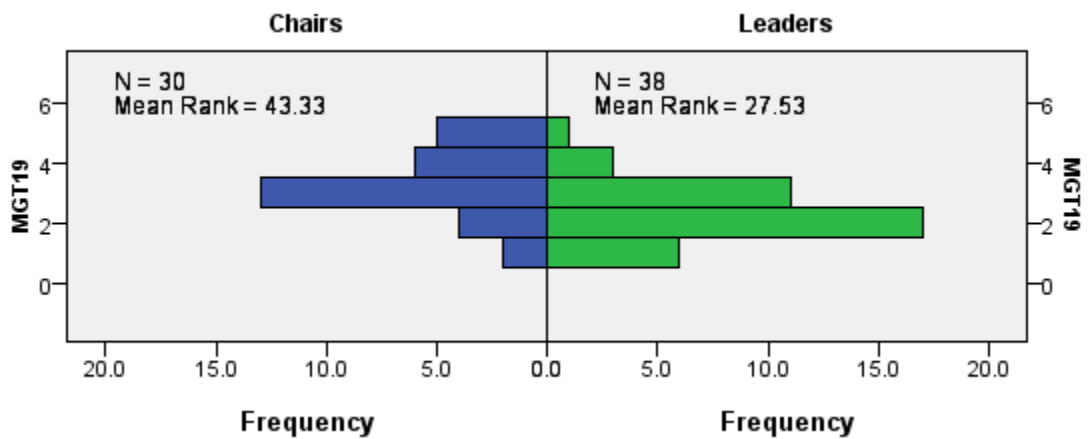


Figure 42. Frequency of responses by groups for management competency 19: organizational theory. ($U=835.00$, $z=3.41$, $p=.001$, $r=.41$)

Rating of Public Programming Competencies

Table 29 shows the median scores for the nine public programming competencies for both groups, the difference in medians, the Mann-Whitney U test statistic (U), the standardized test statistic (z), and the size of effect (r). For museum leaders, the highest rated competencies, all with a median score of 3.0, indicating a moderate level of knowledge or ability, were: communications; exhibitions; program development; and the use of text, objects, graphics, manipulative materials, and media. The program chairs group rated all of the competencies in the public programming category with a median score of 4.0, indicating a high level of knowledge or ability, except for communications ($MD=3.0$) and visitor services ($MD=3.0$).

A Mann-Whitney U test evaluated the difference in the responses between the two groups in the rating of each public programming competency. The test showed a statistically significant difference ($p<.05$) in responses by museum leaders and program chairs for all nine public programming competencies. As seen in Table 29, the difference in median scores was large for all of the public programming competencies except for communications ($r=.31$), which showed a moderate difference in median scores between the two groups.

Table 29
Median Scores for Museum Public Programming Competencies

	Museum Leaders	Program Chairs	Difference	<i>U</i>	<i>z</i>	<i>r</i>	Effect Size
Communications	3.0	3.0	0.0	796.00	2.63	.31	moderate
Exhibitions	3.0	4.0	1.0	999.00	5.15	.61	large
History/philosophy of museum ed.	2.5	4.0	1.5	1034.50	5.57	.67	large
Ed. theory, informal learning theory, psychology, sociology	2.0	4.0	2.0	970.00	4.75	.57	large
Program development including planning, design, and production	3.0	4.0	1.0	985.50	4.91	.59	large
Visitor studies incl. formative and summative evaluation of programs and exhibitions	2.0	4.0	2.0	988.50	4.66	.56	large
Models of practice, development of interpretive skills/techniques	2.5	4.0	1.5	1062.00	5.55	.66	large
Use of text, objects, graphics, manipulative materials, media	3.0	4.0	1.0	1047.00	5.46	.65	large
Visitor services	2.0	3.0	1.0	959.50	4.34	.52	large

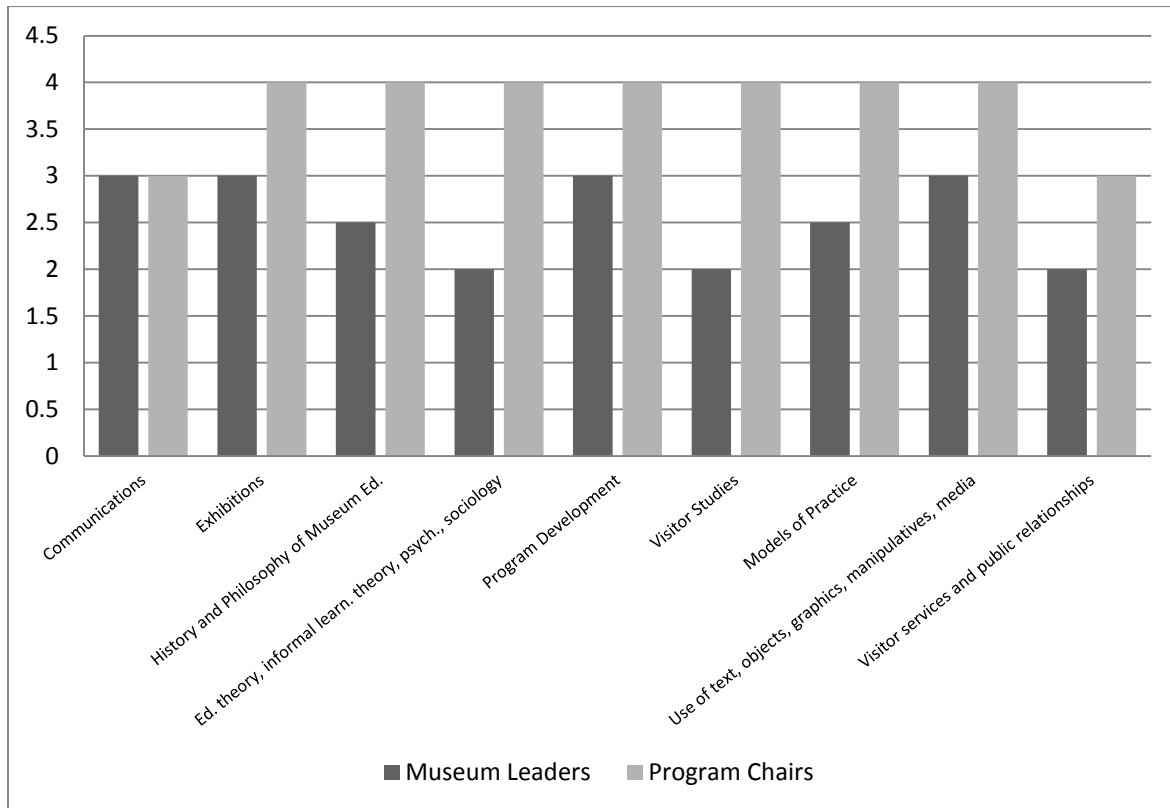


Figure 43. Median scores for museum public programming competencies

The frequencies of responses by groups for each of the nine public programming competencies are presented in Figures 44-52.

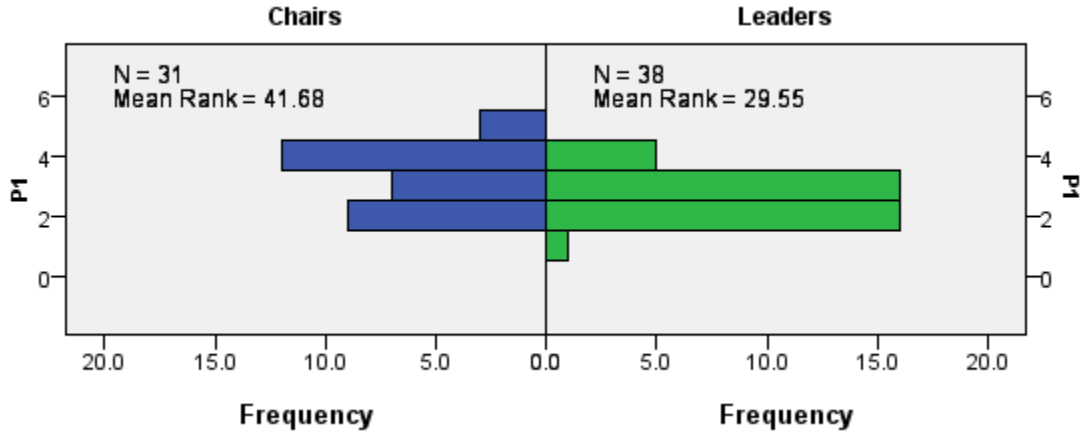


Figure 44. Frequency of responses by groups for public programming competency 1: communications. ($U=796.00$, $z=2.63$, $p=.009$, $r=.31$)

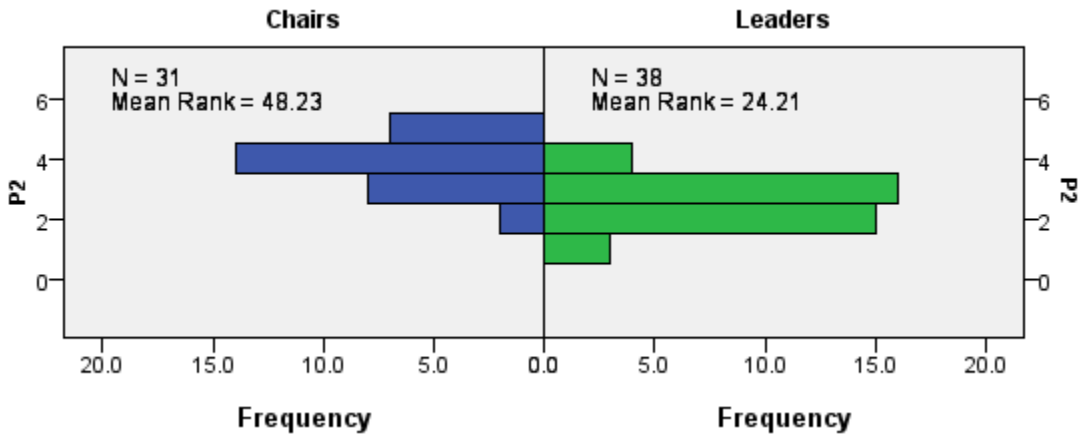


Figure 45. Frequency of responses by groups for public programming competency 2: exhibitions. ($U=999.00$, $z=5.15$, $p=.000$, $r=.61$)

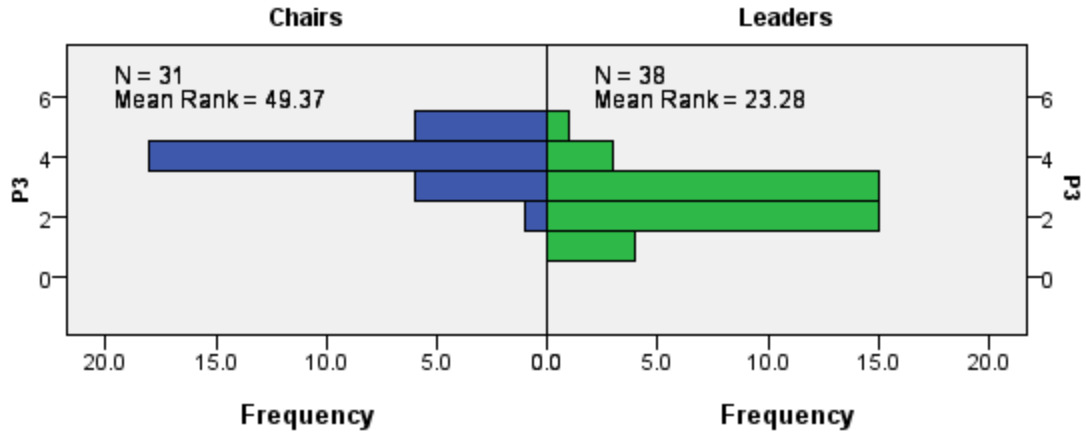


Figure 46. Frequency of responses by groups for public programming competency 3: history and philosophy of museum education. ($U=1034.50$, $z=5.57$, $p=.000$, $r=.67$)

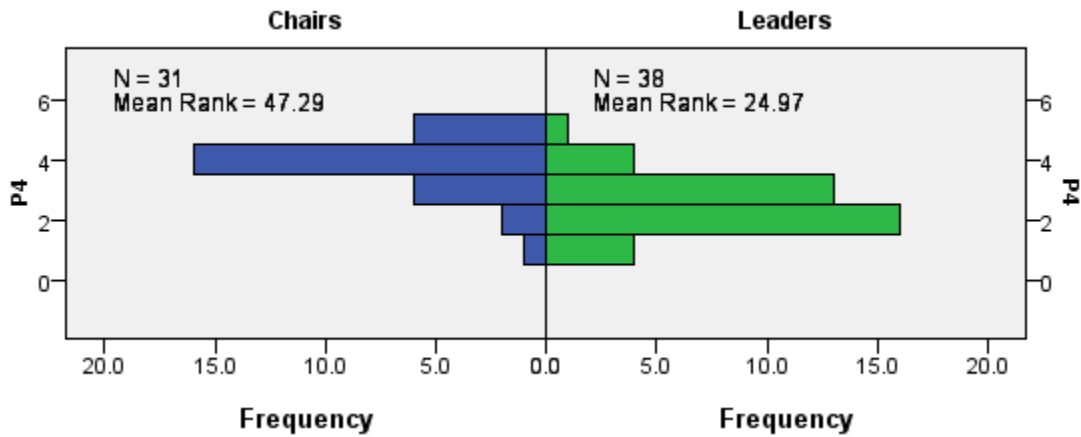


Figure 47. Frequency of responses by groups for public programming competency 4: educational theory, informal learning theory, psychology and sociology. ($U=970.00$, $z=4.75$, $p=.000$, $r=.57$)

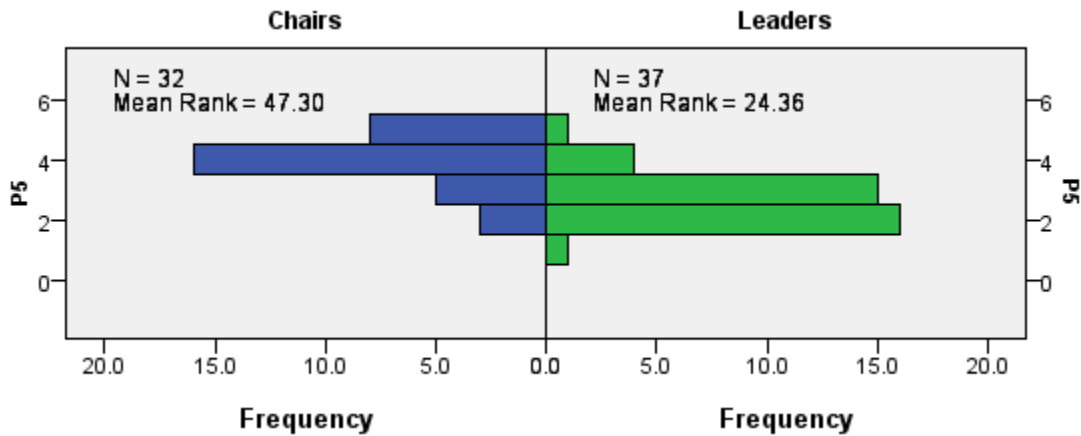


Figure 48. Frequency of responses by groups for public programming competency 5: program development. ($U=985.50$, $z=4.91$, $p=.000$, $r=.59$)

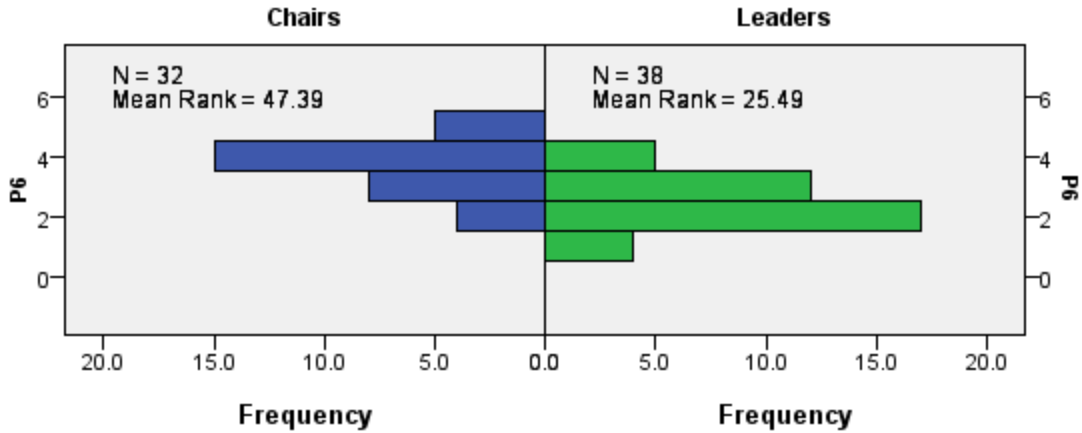


Figure 49. Frequency of responses by groups for public programming competency 6: visitor studies. ($U=988.50$, $z=4.66$, $p=.000$, $r=.56$)

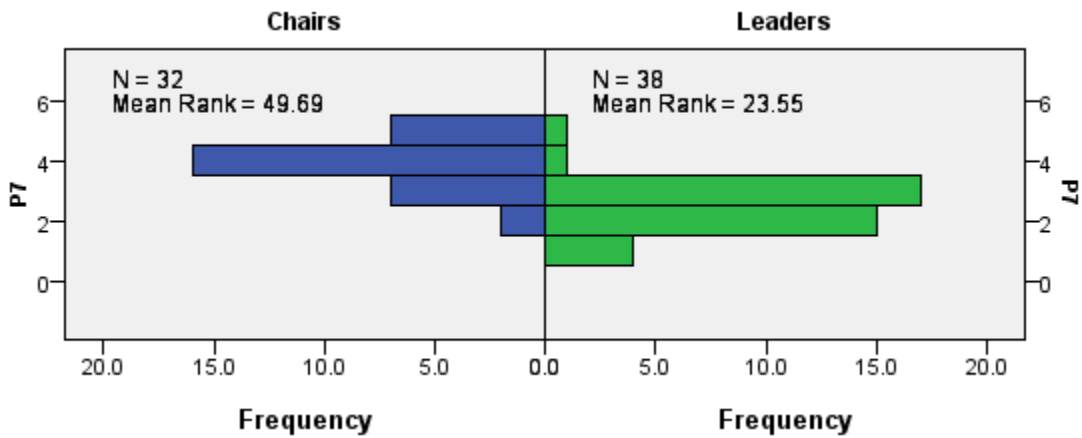


Figure 50. Frequency of responses by groups for public programming competency 7: models of practice, development of interpretive skills and techniques. ($U=1062.00$, $z=5.55$, $p=.000$, $r=.66$)

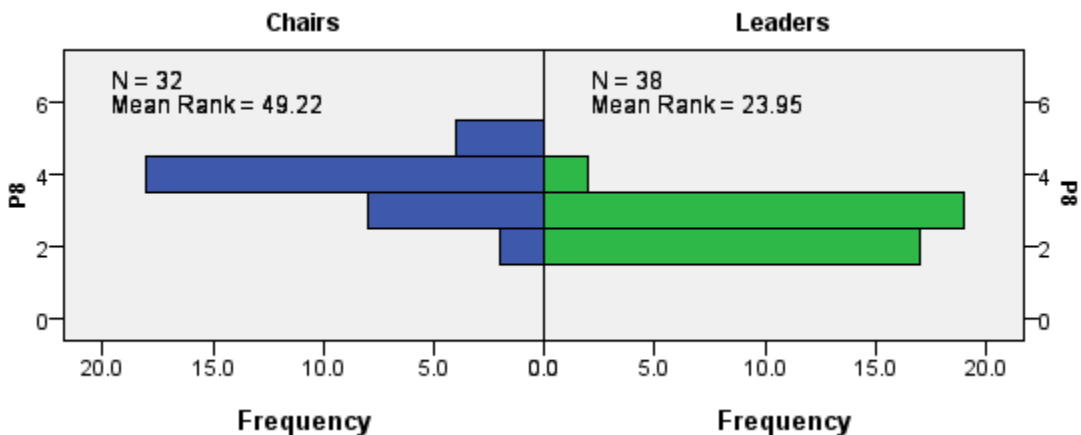


Figure 51. Frequency of responses by groups for public programming competency 8: use of text, objects, graphics, manipulative materials, and media. ($U=1047.00$, $z=5.46$, $p=.000$, $r=.65$)

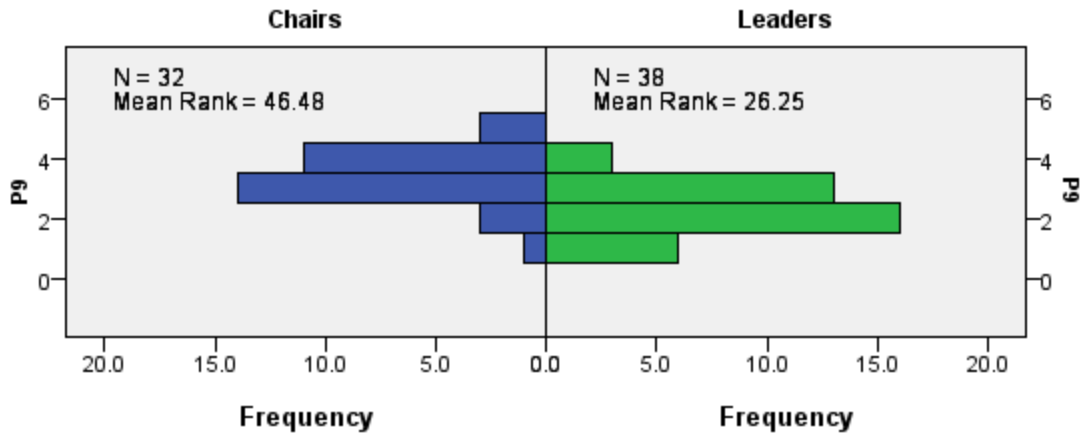


Figure 52. Frequency of responses by groups for public programming competency 9: visitor services and public relationships. ($U=959.50$, $z=4.34$, $p=.000$, $r=.52$)

Rating of Information and Collections Management and Care Competencies.

Table 30 shows the median scores for the 18 information and collections management and care competencies for both groups, the difference in medians, the Mann-Whitney U test statistic (U), the standardized test statistic (z), and the size of effect (r). Museum leaders rated every one of these competencies relatively low with a median score of 2.0, indicating a basic level of knowledge or ability is expected in entry-level museum professionals. Museum studies program chairs rated 11 of these 18 competencies relatively high with a median score of 4.0, indicating a high level of knowledge or ability is reached by their students through their curricula. Following are the competencies in this category rated highest ($MD=4.0$) by the program chairs:

- History and philosophy of collecting
- Knowledge of kinds of collections
- Collections management-policies, systems, vocabulary, and metadata standards
- Accession, registration, cataloging, record keeping, software
- Storage methods and systems

Use of collections in exhibitions

Access to collections: cultural, psychological, physical and intellectual visitation

Deaccession/disposal procedures

Preventive care; pest mgt.; agents of deterioration; physical, chemical and biological factors

Environment: temp., RH, light and atmospheric pollutants; monitoring and control

Collections handling, moving, packing, and transporting

A Mann-Whitney *U* test evaluated the difference in the responses between the two groups in the rating of each of the information and collections management and care competencies. The test showed a statistically significant difference ($p < .05$) in responses by museum leaders and program chairs for all of these competencies. As seen in Table 30, the difference in median scores was large for 13 of these 18 competencies. The difference in median scores was at least moderate for all of the information and collections management and care competencies.

Table 30
Median Scores for Information and Collections Management and Care Competencies

	Museum Leaders	Program Chairs	Difference	<i>U</i>	<i>z</i>	<i>r</i>	Effect Size
Archives	2.0	3.0	1.0	808.50	3.86	.46	moderate
History and philosophy of collecting	2.0	4.0	2.0	1070.00	6.05	.72	large
Knowledge of kinds of collections	2.0	4.0	2.0	1070.50	6.11	.73	large
Collection management-policies, systems, vocabulary, metadata standards	2.0	4.0	2.0	978.00	5.66	.68	large
Accession, registration, cataloging, record keeping, software	2.0	4.0	2.0	926.00	4.96	.59	large
Storage methods and systems	2.0	4.0	2.0	922.50	4.99	.60	large
Use of collections in exhibitions	2.0	4.0	2.0	1016.00	5.77	.69	large
Access to collections: cultural, psychological, physical and intellectual visitation	2.0	4.0	2.0	1064.00	5.96	.71	large
Deaccession/disposal procedures	2.0	4.0	2.0	936.50	4.73	.57	large
Preventive care; pest mgt.; agents of deterioration; physical, chemical and biological factors	2.0	4.0	2.0	876.00	4.34	.52	large
Environment: temp., RH, light and atmospheric pollutants; monitoring and control	2.0	4.0	2.0	929.00	4.71	.56	large
Collections handling, moving, packing, and transporting	2.0	4.0	2.0	909.50	4.69	.56	large
Loans	2.0	3.0	1.0	852.00	4.62	.55	large
Legal issues including title, deaccession, intellectual property, copyright	2.0	3.0	1.0	870.50	3.92	.47	moderate
Digitization of collections	2.0	3.0	1.0	806.00	3.76	.45	moderate
Conservation and restoration	2.0	3.0	1.0	787.50	3.21	.38	moderate
Built environment including sites, landscapes, historic structures	2.0	3.0	1.0	697.50	3.48	.42	moderate
Intangible heritage (e.g. oral history, folklife, language)	2.0	3.0	1.0	796.00	4.25	.51	large

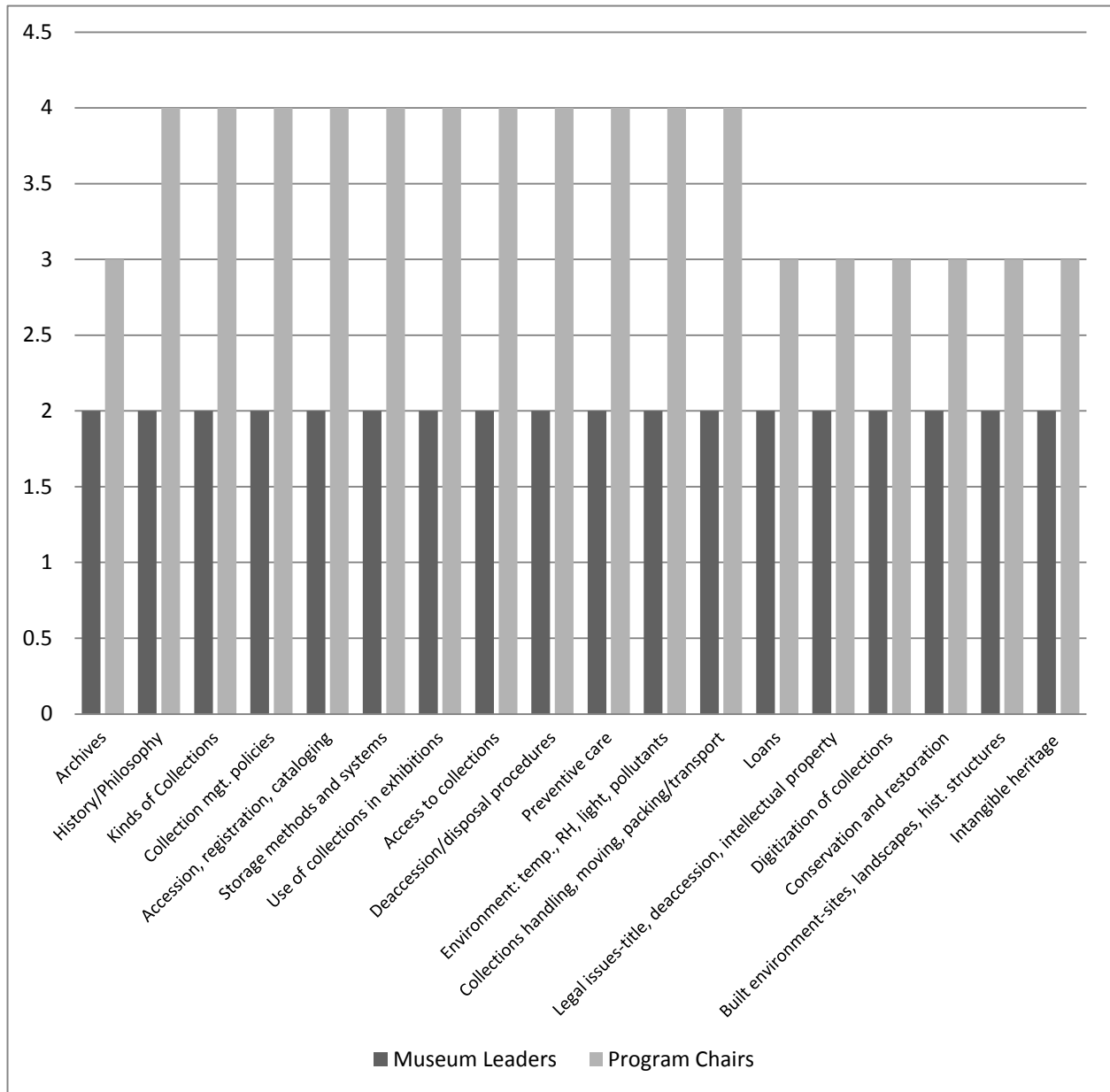


Figure 53. Median scores for information and collections management and care competencies

The frequencies of responses by groups for each of the 18 information and collections management and care competencies are presented in Figures 54-71.

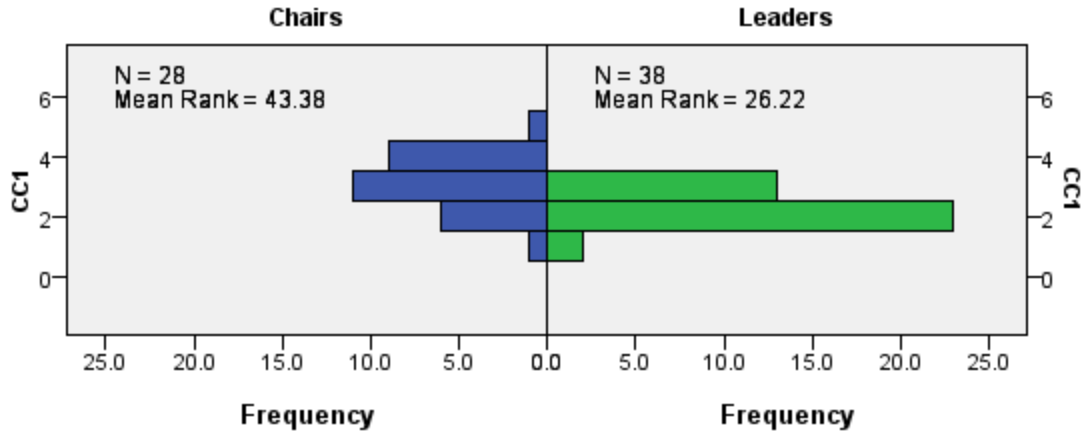


Figure 54. Frequency of responses by groups for information and collections management and care competency 1: archives. ($U=808.50$, $z=3.86$, $p=.000$, $r=.46$)

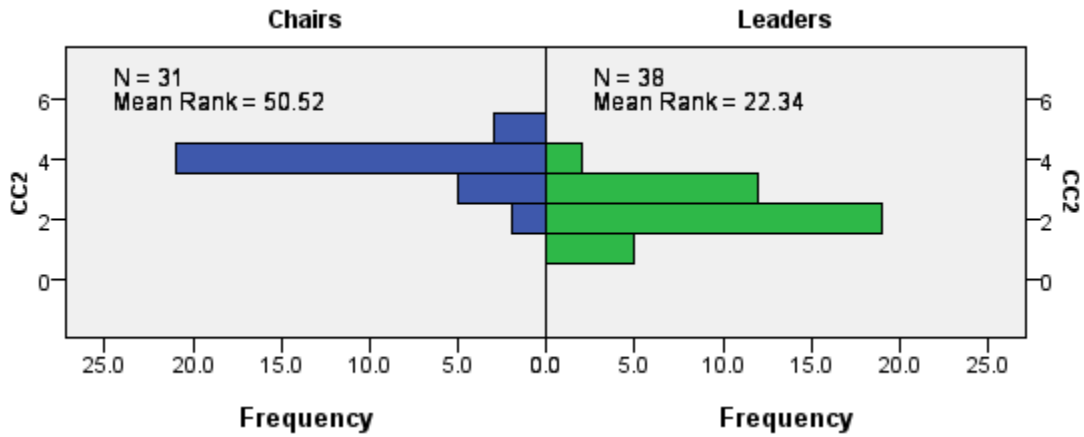


Figure 55. Frequency of responses by groups for information and collections management and care competency 2: history and philosophy of collecting. ($U=1070.00$, $z=6.05$, $p=.000$, $r=.72$)

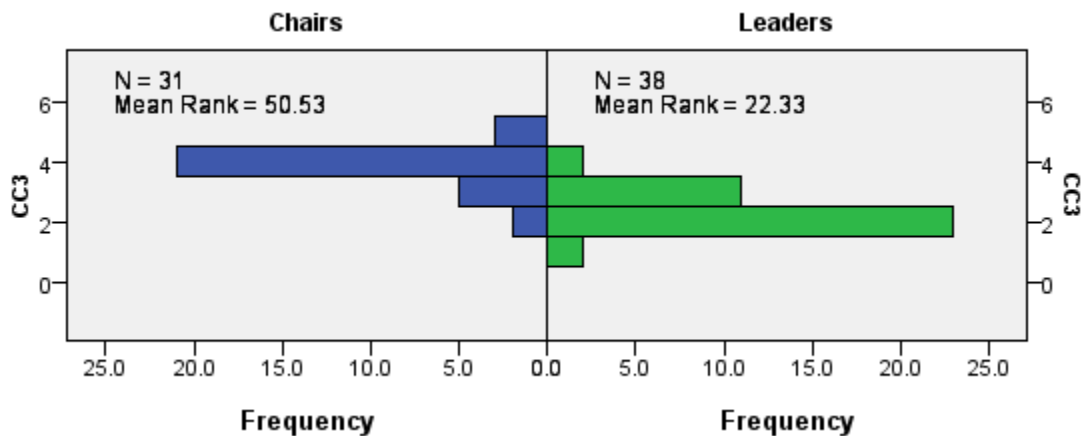


Figure 56. Frequency of responses by groups for information and collections management and care competency 3: knowledge of kinds of collections. ($U=1070.50$, $z=6.11$, $p=.000$, $r=.73$)

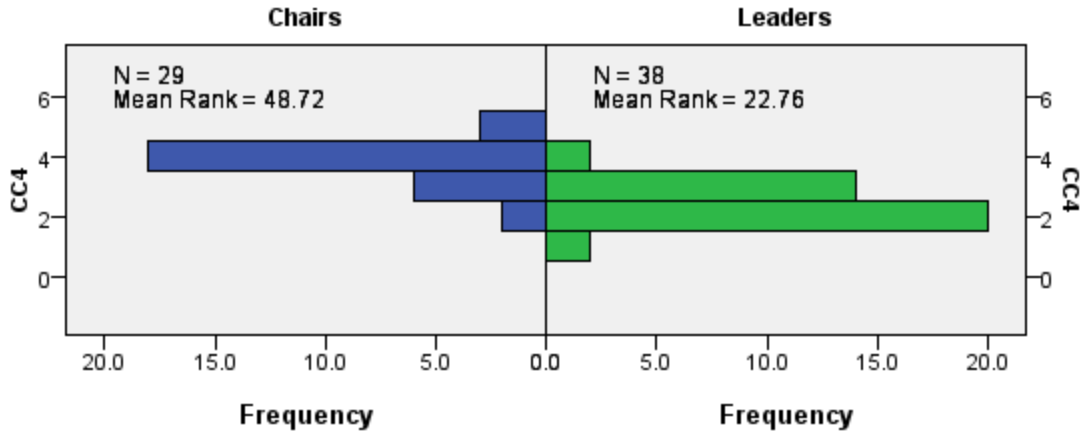


Figure 57. Frequency of responses by groups for information and collections management and care competency 4: collection management-policies, systems, vocabulary, metadata standards. ($U=978.00$, $z=5.66$, $p=.000$, $r=.68$)

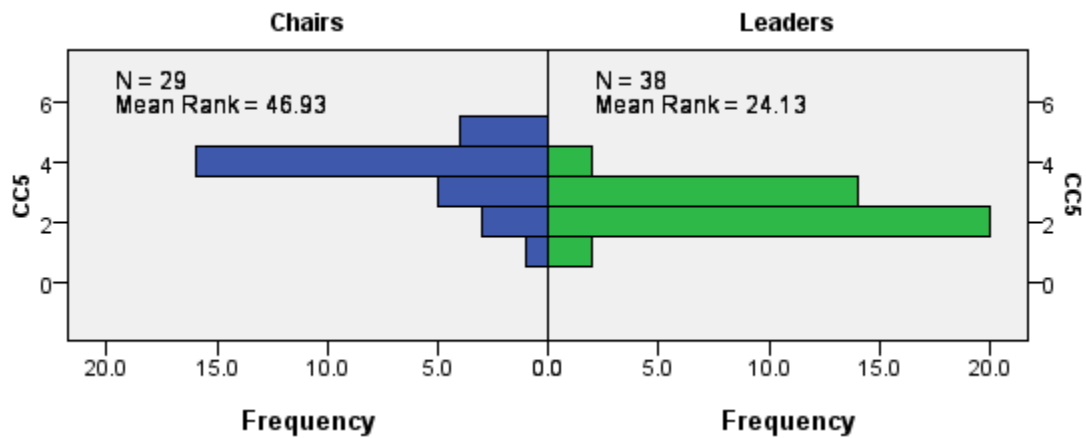


Figure 58. Frequency of responses by groups for information and collections management and care competency 5: accession, registration, cataloging, recordkeeping, software. ($U=926.00$, $z=4.96$, $p=.000$, $r=.59$)

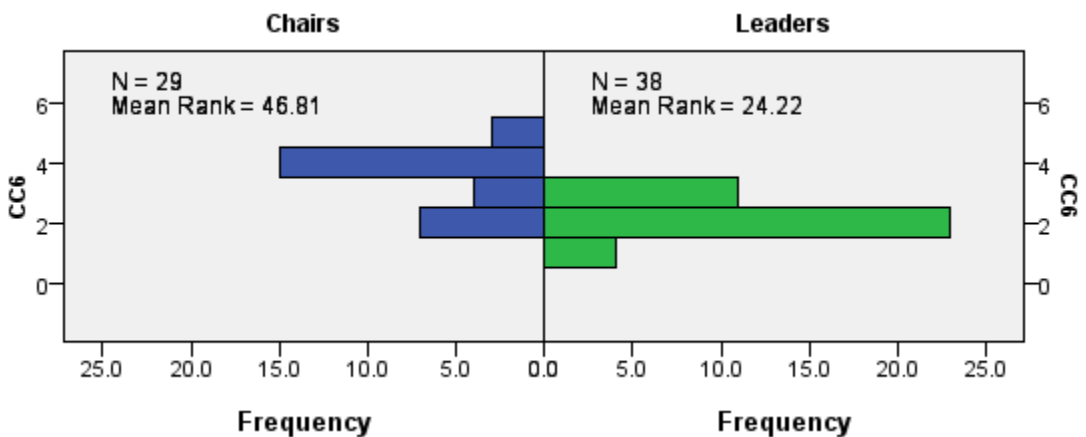


Figure 59. Frequency of responses by groups for information and collections management and care competency 6: storage methods and systems. ($U=922.50$, $z=4.99$, $p=.000$, $r=.60$)

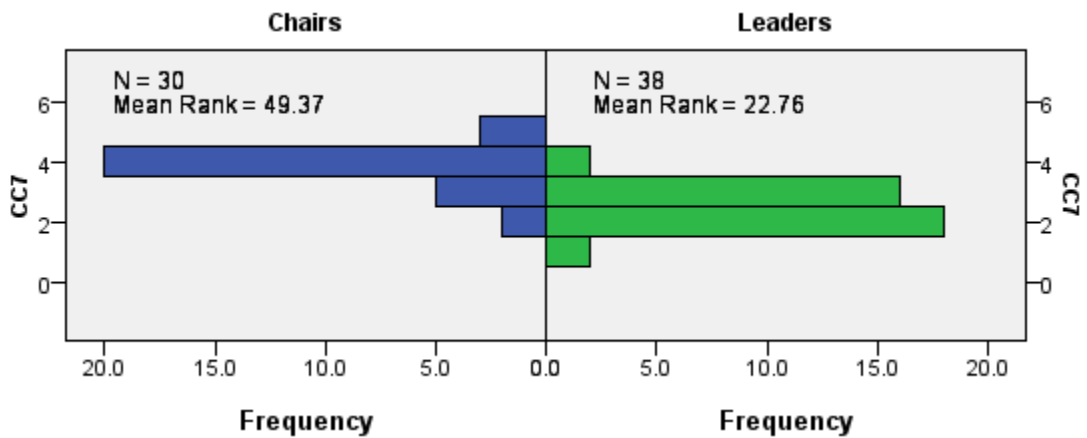


Figure 60. Frequency of responses by groups for information and collections management and care competency 7: use of collections in exhibitions. ($U=1016.00$, $z=5.77$, $p=.000$, $r=.69$)

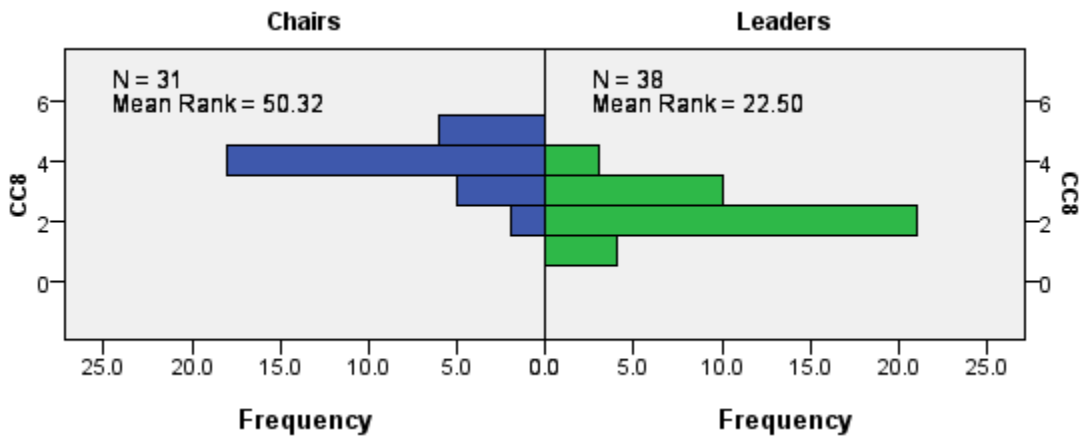


Figure 61. Frequency of responses by groups for information and collections management and care competency 8: access to collections. ($U=1064.00$, $z=5.96$, $p=.000$, $r=.71$)

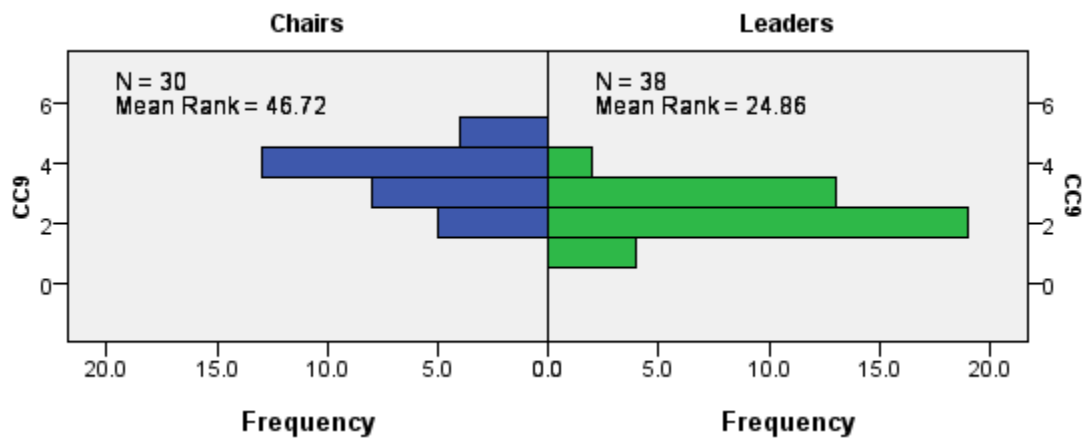


Figure 62. Frequency of responses by groups for information and collections management and care competency 9: deaccession / disposal procedures. ($U=936.50$, $z=4.73$, $p=.000$, $r=.57$)

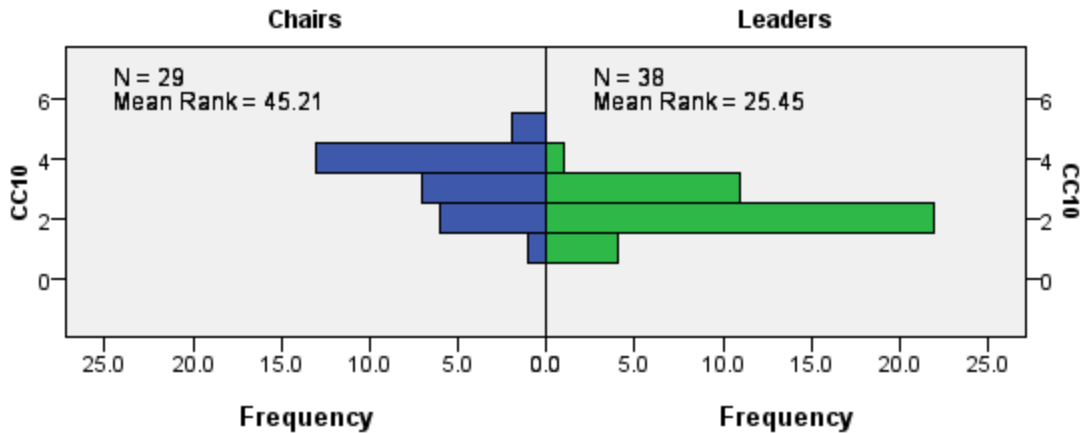


Figure 63. Frequency of responses by groups for information and collections management and care competency 10: preventive care; pest management; agents of deterioration; physical, chemical and biological factors. ($U=876.00$, $z=4.34$, $p=.000$, $r=.52$)

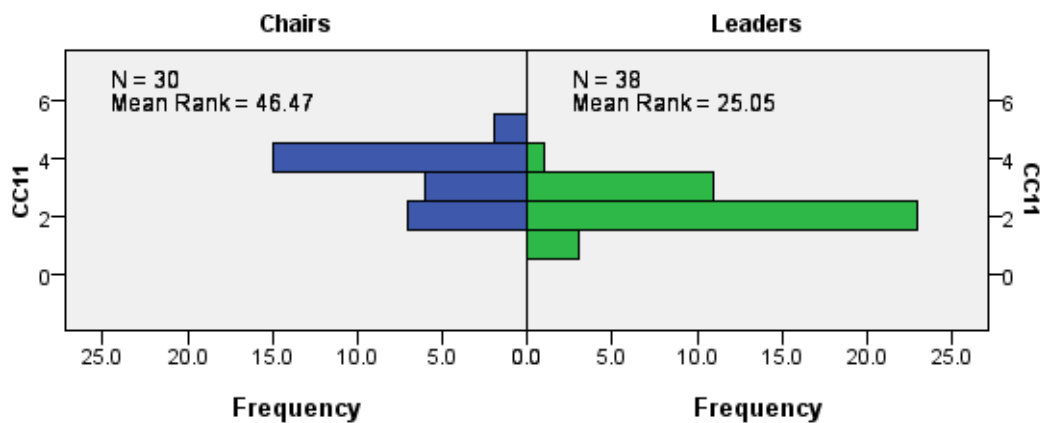


Figure 64. Frequency of responses by groups for information and collections management and care competency 11: environment: temperature, RH, light and atmospheric pollutants; monitoring and control. ($U=929.00$, $z=4.71$, $p=.000$, $r=.56$)

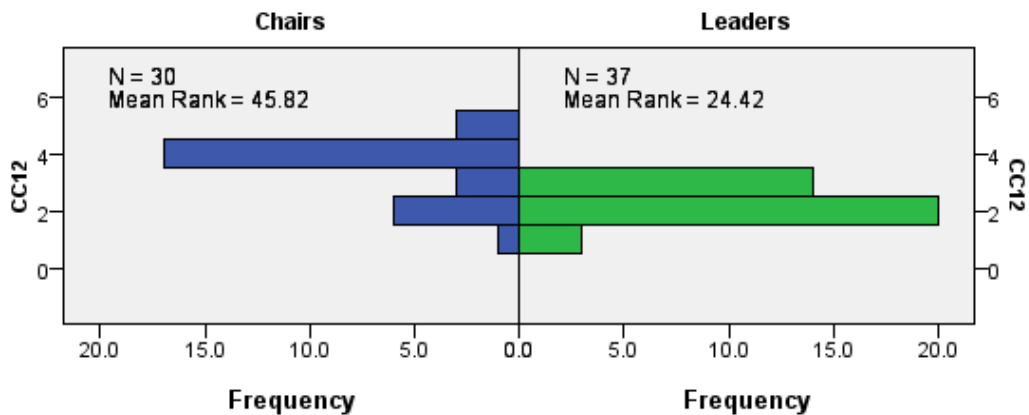


Figure 65. Frequency of responses by groups for information and collections management and care competency 12: collections handling, moving, packing, and transporting. ($U=909.50$, $z=4.69$, $p=.000$, $r=.56$)

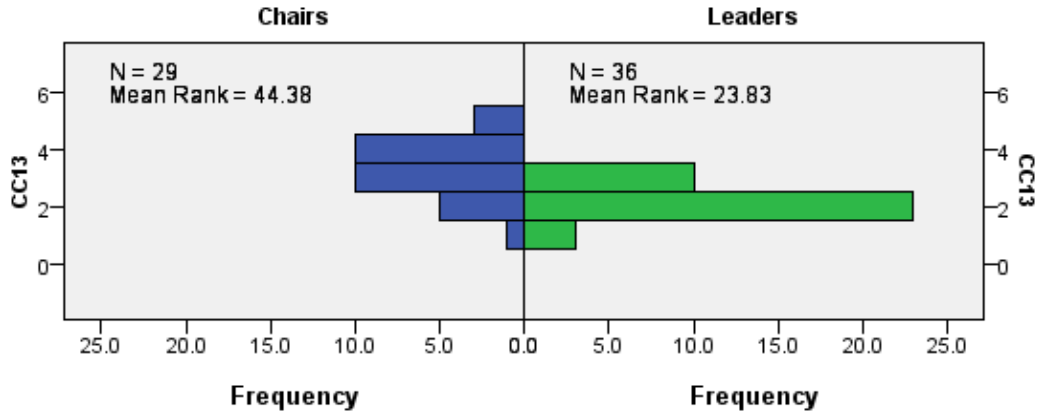


Figure 66. Frequency of responses by groups for information and collections management and care competency 13: loans. ($U=852.00$, $z=4.62$, $p=.000$, $r=.55$)

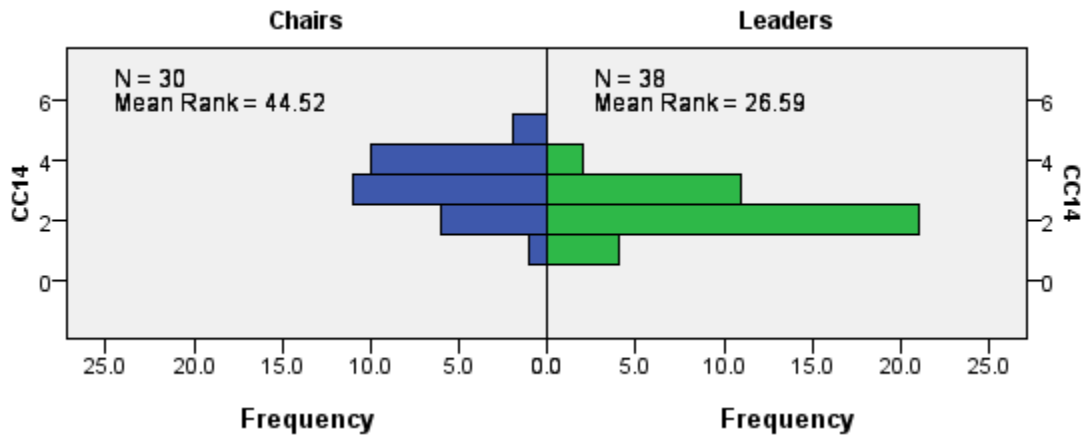


Figure 67. Frequency of responses by groups for information and collections management and care competency 14: legal issues including title, deaccession, intellectual property, copyright. ($U=870.50$, $z=3.92$, $p=.000$, $r=.47$)

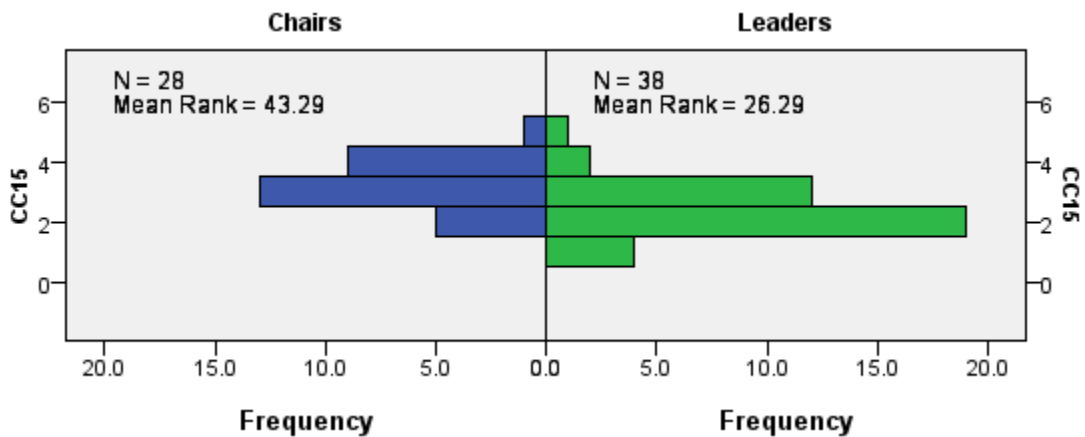


Figure 68. Frequency of responses by groups for information and collections management and care competency 15: digitization of collections. ($U=806.00$, $z=3.76$, $p=.000$, $r=.45$)

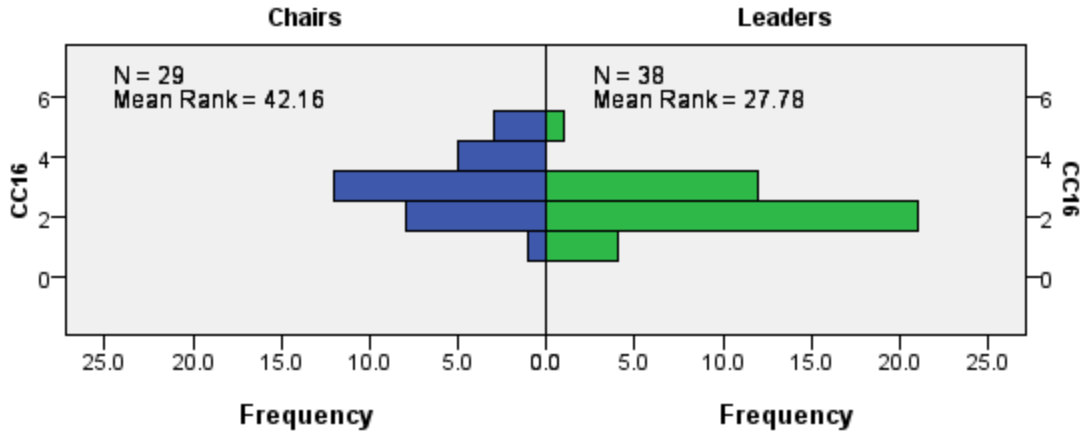


Figure 69. Frequency of responses by groups for information and collections management and care competency 16: conservation and restoration. ($U=787.50$, $z=3.21$, $p=.001$, $r=.38$)

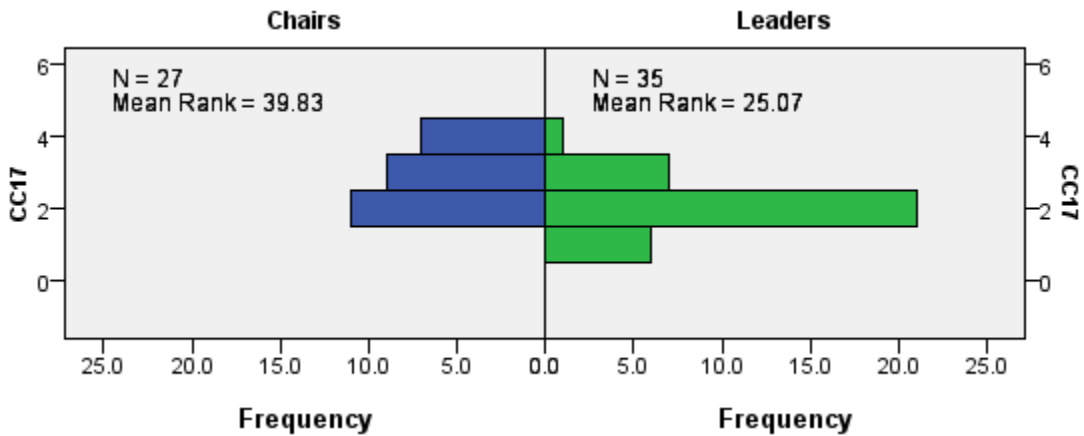


Figure 70. Frequency of responses by groups for information and collections management and care competency 17: built environment including sites, landscapes, historic structures. ($U=697.50$, $z=3.48$, $p=.001$, $r=.42$)

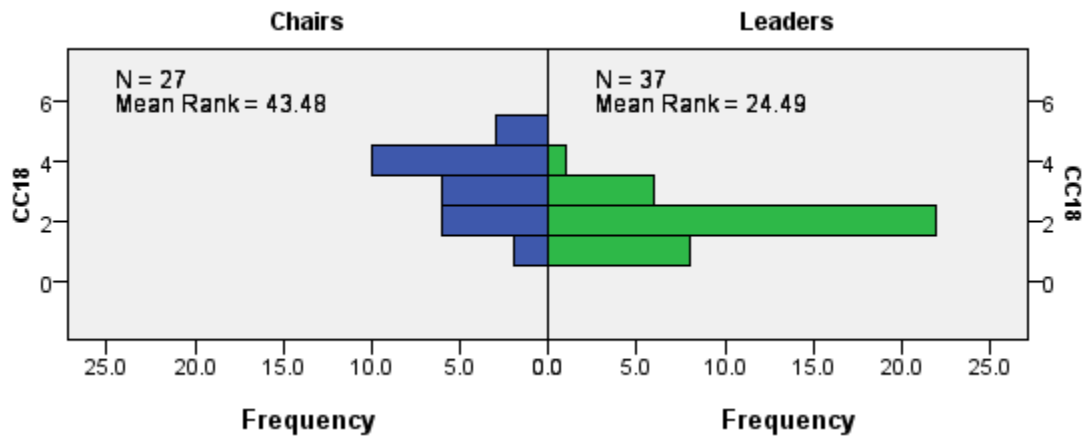


Figure 71. Frequency of responses by groups for information and collections management and care competency 18: intangible heritage. ($U=796.00$, $z=4.25$, $p=.000$, $r=.51$)

Competencies Most Valued by Museum Leaders

The secondary research question, “What competencies do respected leaders in the museum profession most expect entry-level museum professionals to possess to meet current and anticipated future needs?” was answered through the research findings through an analysis of median scores by museum leaders for each competency on a rating scale. For the purpose of this study, competencies receiving a median score of at least 3.0, indicating a moderate level of knowledge or ability necessary for entry-level professional positions, are considered by the researcher as those that museum leaders *most* value. A moderate level was defined in this study as “able to perform tasks related to this competency with very little supervision” and a high level was defined as “able to perform tasks related to this competency without supervision.” Twenty of the 65 competencies tested were rated through median scores as moderate or high by museum leaders and are presented in Table 31. These 20 competencies represent those that museum leaders expect entry-level museum professionals to be able to perform with little or no supervision. Of these 20 most valued competencies, only two, interpersonal relationships and professionalism, received a median score of 4.0 by museum leaders.

The 20 competencies most valued by museum leaders all come from the categories of general, museology, management, and public programming and include none of the information and collections management and care competencies. A closer look at these most valued competencies reveals that many are related either to museum administration and management (financial management, information technology, project management, vision) or the public dimension of museums (museums and society, community museology, roles and functions of museums, community relations, public programming communications, exhibitions, program development).

Table 31
Competencies Most Valued by Museum Leaders

Category	Competency	Level of knowledge or ability necessary
General	Interpersonal relationships	High
	Professionalism	High
	Communications	Moderate
	Financial Management	Moderate
	Information Technology	Moderate
	Museums and Society	Moderate
	Nature of Work	Moderate
	Project Management	Moderate
	Research	Moderate
	Resources in the Field	Moderate
Museology	Community museology	Moderate
	Roles and Functions of Museums	Moderate
	Vision	Moderate
	Issues in Museum Practice	Moderate
Management	Community relations	Moderate
	Information Management	Moderate
Public Programming	Communications	Moderate
	Exhibitions	Moderate
	Program development including planning, design, and production	Moderate
	Use of text, objects, graphics, manipulative materials, media	Moderate
Information and Collections Mgt. and Care	None	N.A.

Competencies Most Emphasized in Graduate Museum Studies Curricula

The secondary research question, “What is currently taught in graduate museum studies programs in the United States and which curriculum areas are most emphasized?” was also answered through the research findings through an analysis of median scores by museum studies program chairs for each competency on a rating scale. For the purpose of this study, the

competencies that the researcher considers *most* emphasized in museum studies curricula are those that received a median score of at least 4.0, indicating a high level of knowledge or ability is reached by students through curricula. Thirty-four of the 65 competencies tested were rated high through median scores, and are presented in Table 32. These 34 competencies represent those that museum studies program chairs believe that their students, upon completing their curriculum, are able to perform without supervision.

Table 32

Competencies Most Emphasized in Graduate Museum Studies Curricula

Category	Competency	Level of knowledge or ability necessary
General	Communications	High
	Interpersonal Relationships	High
	Museums and Society	High
	Nature of Work	High
	Professionalism	High
	Project Management	High
	Research	High
	Resources in the Field	High
Museology	Community museology	High
	Development of the museum profession	High
	Roles and functions of museums	High
	Vision	High
	Issues in museum practice	High
Management	Community relations	High
	Information Management	High
	Formal Organizational Structure	High
Public Programming	Exhibitions	High
	History and philosophy of museum education	High
	Ed. theory, informal learning theory, psych., and sociology	High
	Prog. development incl. planning, design, and production	High
	Visitor studies incl. formative and summative evaluation of programs and exhibitions	High
	Models of practice, dev. of interpretive skills, techniques	High
	Use of text, objects, graphics, manipulatives, and media	High
Information and Collections Mgt. and Care	History and philosophy of collecting	High
	Knowledge of kinds of collections	High
	Collection mgmt.-policies, systems, vocab., metadata standards	High
	Accession, registration, cataloging, recordkeeping, software	High
	Storage methods and systems	High
	Use of collections in exhibitions	High
	Access to collections: cultural, psychological, physical and intellectual visitation	High
	Deaccession/disposal procedures	High
	Preventive care; pest mgmt.; agents of deterioration; physical, chemical and biological factors	High
	Environment: temp., RH, light and atmospheric pollutants; monitoring and control	High
	Collections handling, moving, packing, and transporting	High

Comparison of Competencies Most Valued by Museum Leaders with those Most Emphasized in Graduate Museum Studies Curricula

A comparison of the competencies *most valued* by museum leaders (moderate level of knowledge or ability) with the competencies *most emphasized* in museum studies curricula (high level of knowledge or ability) shows that three of the 20 competencies most valued by museum leaders are not among the competencies most emphasized in museum studies curricula. These three competencies are financial management, information technology, and public programming communications. Conversely, the comparison also shows that 17 of the 34 competencies most emphasized in museum studies curricula are not among those most valued by museum leaders. Eleven of these competencies most emphasized in curricula, but not among those most valued by museum leaders, are from the category of information and collections management and care. Furthermore, as described earlier, the Mann-Whitney *U* test showed the degree of difference in median scores was large for each of these eleven information and collections management and care competencies (see Table 30). Table 33 lists all competencies evaluated in this study and indicates if they are among those most valued by museum leaders or most emphasized in museum studies curricula.

Table 33.

Summary of Results Comparing Competencies Most Valued by Museum Leaders to Those Most Emphasized in Graduate Museum Studies Curricula

Competency	Competency MOST...		Competency	Competency MOST...	
	...Valued by Museum Leaders	...Emphasized in Museum Studies Curricula		...Valued by Museum Leaders	...Emphasized in Museum Studies Curricula
General			Public Programming		
Communications	X	X	Communications	X	
Environmentalism and its Impact			Exhibitions	X	X
Evaluation Methods			History and philosophy of museum education		X
Financial Management	X		Ed. theory, informal learning theory, psychology, and sociology		X
Information Technology	X		Program development including planning, design, and production	X	X
Interpersonal Relationships	X	X	Visitor studies of programs and exhibitions		X
Museums and Society	X	X	Models of practice, development of interpretive skills/techniques		X
Nature of Work	X	X	Use of text, objects, graphics, manipulative materials, and media	X	X
Professionalism	X	X	Visitor services		
Project Management	X	X	Information/ Collections Management and Care		
Research	X	X	History and philosophy of collecting		X
Resources in the Field	X	X	Archives		
Museology			Knowledge of kinds of collections		X
Community museology	X	X	Collection mgmt-policies, systems, vocabulary, metadata stds.		X
Development of the Museum Profession		X	Accession, registration, cataloging, record keeping, software		X
Roles and Functions of Museums	X	X	Storage methods and systems		X
Vision	X	X	Use of collections in exhibitions		X
Governance			Access to collections: cultural/psych/physical/intellectual visitation		X
Issues in Museum Practice	X	X	Deaccession/disposal procedures		X
Legal Context for Practice			Preventive care; pest mgt.; deterioration; physical/ chem/ bio factors		X
Management			Env.: temp., RH, light and atmospheric pollutants; monitoring/control		X
Accreditation			Collections handling, moving, packing, and transporting		X
Advisory Bodies			Loans of collections		
Architecture			Legal issues (title, deaccession, intellectual property, copyright)		
Business/Operational Management			Digitization of collections		
Community Relations	X	X	Conservation and restoration		
Financial Planning and Management			Built environment including sites, landscapes, historic structures		
Formal Organizational Structure		X	Intangible heritage (e.g. oral history, folklife, language)		
Fund Raising and Grant Development					
Human Resource Planning and Mgt.			Notes:		
Income Producing Activities-concessions, fees, retail			1. This table summarizes the data presented in Tables 31 and 32 above.		
Information Management	X	X	2. The list of competencies was developed by the International Committee for the Training of Personnel of the International Council on Museums.		
Insurance/Indemnity			3. Determination of competencies MOST valued by museum leaders was based on a median score of 3 or higher. Determination of competencies MOST emphasized in museum studies curricula was based on a median score of 4 or higher.		
Law					
Marketing					
Memberships/"Friends" Organizations					
Physical Plant and Site Management					
Public Affairs					
Media Relations					
Organizational Theory					

Description of Findings Based on Open-Ended Responses

Use of Competencies Other Than ICTOP/ICOM Competencies

Museum leaders were asked if they use the ICOM/ICTOP competencies when assessing the qualifications of potential staff members. Nine museum leaders (24%) answered in the affirmative while 29 (76%) answered no. Museum leaders were then asked what other categories or competencies, besides the ICOM/ICTOP competencies, they use for assessing the qualifications of potential staff members. Only two respondents mentioned that they use other competencies developed by professional organizations. One responded that they use competencies developed by library and archives associations and another that they use competencies developed by the American Association of Museums (AAM) and the American Association for State and Local History (AASLH). Seven people responded that they use the competencies developed by their institution for specific job descriptions.

Museum studies program chairs were asked what other categories or competencies, besides the ICOM/ICTOP competencies, are used for developing curriculum. Nine program chairs mentioned using other competencies developed by professional organizations. Seven of these use various publications of AAM. Two programs use standards developed by the Canadian Museums Association. Other professional organizations named by single respondents were: the National Association for Museum Exhibition, the National Council for Public History, the National Association of Schools of Art and Design, and the College Art Association.

Some program chairs indicated that they use other resources besides formal, published sets of competencies. Several reported that they seek input from museum professionals. One of these indicated that their program conducts “key informant surveys of leaders in the field.” Two program chairs indicated that their programs resist the use of developed competencies. One

respondent described, “Our program is not a training program, *per se*, it is an applied theory program that seeks to develop intellectual competencies with regard to thinking about and understanding the role of museums in society, past and present.” Another program chair commented, “The list of competencies is too complex; we use a simpler approach, drawing on...discussions of professional training.”

Most Important Competency

Museum leaders and program chairs were both asked to name the ICOM/ICTOP competency that they feel is most important and explain why. Communication was mentioned most by museum leaders, named 10 times, but was only mentioned by three program chairs. Three museum leaders described interpersonal relationships (teamwork). Community was named twice by museum leaders, but six times by program chairs. One program chair explained that the most important competencies are “those dealing with the community and with the service nature of museums. Unless museum professionals truly understand the importance of serving their audiences they will never be good museum professionals.” The only other competency mentioned more than once by program chairs was museums and society, mentioned three times. In both groups, several respondents resisted naming one competency, indicating the importance of a more general background. One program chair said, “I think that they are all important.” Another commented, “Since our programs are both general in nature, it is not possible to determine one competency that is more important - they are equally important.” One museum leader commented, “no one competency; a blend of management and interpersonal skills.” Another said, “I believe the personal characteristics are most important. Much of what one needs to know to work in a museum can be learned while on the job.”

Skill or Competency Most Often Lacking

Museum leaders were asked to name the skill or competency that they most often find is lacking in applicants. The area most often mentioned was communications, named eight times. Skills related to finance and management were mentioned five times by museum leaders. Several museum leaders commented that what is lacking is real world experience. As one said, “there is a “lack of on-the-job experience such as would be gained in an internship or in a non-professional position such as a site guide or education assistant.”

Program chairs were asked to name the skill or competency that they find lacking in graduates of their programs. Skills related to finance and management were named seven times. Creativity was named three times. One program chair explained, “on the broader scale, the idea of being innovators in the field. The strongest students get it, but a large block just want to ‘take care of objects.’”

Appropriateness of Museum Studies as Preparation for Entry-level Museum Professionals

Both groups were asked if they believe that academic training in museum studies is appropriate preparation for entry-level museum professionals. Twenty-nine museum studies program chairs (97%) answered in the affirmative. Only one (3%) answered that museum studies was not appropriate preparation. Museum leaders were more divided. Twenty-four museum leaders (67%) answered in the affirmative while 12 (33%) indicated that museum studies is not appropriate preparation.

A follow up question asked both groups, “How do you believe one should prepare for entry into the museum field?” In analyzing the responses of museum leaders and program chairs, themes emerged related to experience, subject area academic study (art, history, science, etc.), and museum studies education, although the comments related to these themes were quite

different between the two groups. Nine of the museum leaders emphasized experience in their responses. One museum leader commented, “A degree is great, but nothing beats actually working in a museum.” Another said that the best way to prepare for working in the museum field is through “internships and volunteer experiences in real-life situations.” Another museum leader elaborated,

Nothing beats practical experience. Internships, volunteer experience and most importantly understanding governance by committing the time to serve as a board member of some type of non-profit (not necessarily a museum.) The best internships are ones which give the student a broad view of what a museum is and how all the pieces fit together to form a functioning whole.

Another commented, “The hands-on experience is much more valuable in my opinion. In most cases, the best employees we hire have had extensive experience in museums through internships or volunteer activities.”

Some museum leaders commented on the importance of subject area academic study. Several argued that subject area studies are more important than museum studies. One commented, “Subject area studies should be the foundation. Museum studies, particularly the theoretical side, should come later.” Another said,

Students should concentrate on the knowledge base-history, science, whatever. They should take a class or two in museum operations-collections; admin management-and then get some hands on experience as an intern or entry-level person. It's harder to teach them the history or science than it is to teach them about collections management systems, storage standards, program development.

Another museum leader discussed the lack of practicality in museum studies curricula and stressed the importance of subject area academic training:

Many of the professionals academically trained in museum studies I have encountered have a sense of how things should operate in a perfect world, while failing to apprehend that few museums offer such a perfect world. I think that one's personal traits--flexibility, inquisitiveness, professional commitment, humor, responsiveness to direction--are more valuable than classroom training. *The one area in which academic training is invaluable is in a subject area* [italics added]. My advice to young people weighing a career is to get a firm grounding in the subject area of their interest--history, art history, anthropology, etc.--and worry less about the professional aspects of museum work. Most of that can be taught within the work environment or through workshops or other educational means that take far less time and money than a two-year museum studies program.

Several museum leaders acknowledged the appropriateness of museum studies for preparation for the museum field. One commented,

I entered the field through the back door as a teacher/history major who became first a curator and then an education director and then got my advanced degree in museum administration. However I think it is extremely helpful to prepare to enter the field. Museum studies and public history programs that balance theory with exposure to real institutions, leaders, and staff through class presentations, field trips, and internships vastly benefit the student.

Another museum leader, who believes in the appropriateness of museum studies in spite of having no experience hiring museum studies graduates, said,

I believe academic training in museum studies on the graduate level is adequate preparation for entry-level work, but because of geography and limited salary structure of a public entity, we have virtually no experience with candidates or employees...who have any museum studies background. We have seen a few applicants with some undergraduate coursework or experience in library science, no doubt because that training is available in colleges and universities in the region.

Some museum leaders stressed the appropriateness of museum studies training if it is combined with adequate subject area academic study. One museum leader commented that appropriate preparation would consist of “some museum studies courses with primary degree in an academic field.” Another named “advanced training in the collection focus (art, history, etc.) and training in museum practices.” Another said,

I believe you should get a discipline based advanced degree plus some museum studies or management training. A museum studies degree alone is not enough. An art history M.A. plus an M.B.A. or other management training would be great training for someone who desires to be an art museum director.

In answering this question, one museum leader brought up the argument about whether museum work qualifies as a profession.

First, there is no museum profession any more than there is a profession of hospital people. Just as there are technicians, doctors, nurses, etc., there are curators, conservators, librarians, etc. Each is a separate profession. The definition of a profession is a group of people who create regulations, jargon, and secret handshakes to keep other people out. Museum people and librarians are the worst (or best) in this regard. The best way to

prepare is to be a user of museums and bring that sensitivity to the institution you work for. The other is to care about people first and things second. That will fix a lot.

Many museum studies program chairs, while making arguments in favor of the appropriateness of museum studies as preparation for entering the museum field, stressed that it should be combined with subject area academic study, and/or practical experience. As one program chair commented, museum professionals need “strong academic background in a discipline. Graduate training in both a museum discipline (history, art history, science) AND in practical training (museum theory, exhibition, collections management, etc.).” Another said,

A museum studies or certificate degree is excellent preparation when combined with academic training in a museum content discipline like anthropology or art history. Our program attracts students with undergraduate degrees in such areas, and we require a graduate minor in a museum-related content discipline. Field experience is also important and students are encouraged to gain as much experience as they can through internships or part-time paid or volunteer work in museums.

One program chair said that one should prepare for entry into the museum field with “a museum studies certificate or degree plus an advanced degree in a relevant, object based discipline.”

Another offered, “Combine both academic work with internships and practical training. Attend conferences and take advantage of professional development opportunities.” Another favored a curriculum where museum studies is secondary to the content discipline. “I believe in certificate programs, where students have a base in a content discipline.”

Many program chairs emphasized the importance of field experiences (through course projects, practica, internships, and volunteering) in their comments on appropriate preparation for the museum field.

Our program focuses on being an applied program, which means that all of our coursework is taught in the museum setting by experienced museum professionals and assigned projects are aligned with current projects and programming in the museum. This helps students build portfolios of projects that actually took place. ... That said, I also think that museum literature and theory provides a thorough grounding in what we do as museum professionals, patterns over time, and new directions. Graduate school is the time to thoroughly ground ourselves in our literature and set the passion for continued research, writing, and reflection.

Some program chairs stressed the importance of volunteering in museums to gain practical experience that supplements the museum studies curriculum. As one stated, "Visit and volunteer in as many museums as possible, to cultivate a love for the field." Another program chair, however, had strong words about the museum field's expectations for entry-level professionals regarding internships and volunteer experience:

I am against the very prevalent expectation that students should also do unpaid volunteering and internships (which are largely beyond the control of any curriculum oversight too) before they are even offered entry-level work. That serves museums as it controls the applicant pool numbers and puts the costs of training onto prospective employees, but also creates an unreasonable barrier for entry to the field by anyone who isn't middle class. What other "profession" trains their workforce that way?

Identifying the Changing Needs of the Museum Field

Museum leaders and museum studies program chairs were asked to describe the changing needs of the museum field and the kinds of knowledge and abilities they foresee will be needed

in the future. Among museum leaders and museum studies program chairs, themes of technology, community/audience, and finance emerged.

Nine of the 32 museum leaders responding to this question stressed technology in their responses. Following are several of their observations:

Proliferation of electronic media will undoubtedly change how museums communicate with their public audiences and the nature of the museum experience for visitors. The supremacy of visitor interactions with authentic materials--whether they are historic, artistic, scientific, or living collections--will prevail for some segments of the public. But others who look to museums primarily as sources of information may avail themselves of that learning through virtual, rather than physical, mechanisms.

Obviously IT skills and the ability to use these skills to further the museum field [are needed]. At the same time I think we need to remember that the basis of the museum are artifacts--that is the heart and soul of what we do--preserve them for the future and interpret them for our current visitors. Use of media, etc. is great, but only if it helps understand the artifact, etc. that it is interpreting.

Several museum leaders focused on commitment to audience and community in describing the changing needs of the museum field. One museum leader commented, "A grounding in how museums provide service to the community beyond the obvious is critically important for museums during this time of questioning funding for the arts and humanities." Another added, "Audience is so much more important than ever before, and relevance, which is talked about a great deal...If we're not engaging them, we will cease to exist. And I'm not talking about marketing here."

Several museum leaders mentioned the importance of financial issues including fundraising, financial management, and income generation. As one museum leader lamented, I wish that it were not so, but the museum field is more and more concerned with money. How to get it, account for it, and how to spend it well. Mostly how to get it. If I were just starting out in the field, and wanted to be a success, I would focus on development work. Unfortunate, but true.

Another said, “The ability to develop profit centers within the museum is a growing area of needed expertise.” One claimed, “I tell students that the sooner they learn about how to develop and manage a budget and manage a project, the sooner they will advance.”

As mentioned above, regarding the changing needs of the museum field and the kinds of knowledge and abilities that will be needed in the future, the same themes emerged from analysis of the responses of museum studies program chairs as emerged from responses of museum leaders. Technology was a more dominant theme as it was emphasized by over half of the program chairs. Following are several responses:

Technology changes our practices daily it seems, yet we know it cannot replace engagement with original objects. It's our duty in graduate programs to introduce students to the newest practices, many include technology, but also reflect and learn from one another on how to use technology as a tool to create authentic engagement with our museum collections.

The use of technology keeps expanding and the field needs to keep up. That said, museum work needs to center on the object and museum studies programs need to foster an understanding and love of the object.

Several program chairs stressed the importance of audience and community in their responses. One program chair cited the need for “understanding and accommodating visitor diversity, particularly non-American born visitors. Building constituencies and stakeholders, especially for funding. Supporting educational programs, especially for the schools.” Another stated that museums “interact more and more with the cultures of the communities they serve.” Another program chair stressed that there has been a shift “...from collections driven to public dimension. [We] need to be able to understand the different audiences that may-or may not-attend museums and promote community relations and outreach. A better understanding of audiences allows for more relevant museums and programs in their particular communities.”

The theme of finance and management was mentioned by only three program chairs. One commented, “money is always an issue.” Another program chair foresees a need for “more creative and adaptive strategies for fundraising. More business acumen.”

Meeting the Current and Anticipated Future Needs of the Museum Field

Museum leaders and museum studies program chairs were asked how graduate museum studies programs are meeting the current and anticipated future needs of specific museums and the museum field as a whole. Responses from museum leaders were very mixed. Eight had positive comments, nine had negative comments, and the remaining responses were either neutral or somewhat mixed. One museum leader commented, “My experience in hiring graduates of graduate museum studies programs, such as Cooperstown, has been that the programs have kept pace with the field.” Another felt that programs were meeting the needs “reasonably well,” and went on to comment,

The challenge of the era is the high expectation for a variety of technological competencies. Applicants who can clearly communicate in written form are competing

with those who have expertise in conveying content through a variety of media, using still and video imagery, on-line delivery, etc. As the next generation of museum workers arrive on the scene, some of these skills will be commonplace, but the entry-level workers may have competencies in these areas that far exceed the capacity of employing institutions to take advantage of them.

Another said, "I think the museum studies programs are, in general, turning out great graduates who have more real world experience and skills than I had entering the field."

Negative responses by museum leaders included some frank criticism. One museum leader questioned the appropriateness of museum studies curricula:

There are too many graduate programs teaching students skills that they will not need when they get a real job. Our museum hires people who have the educational, marketing, financial, human resource, discipline based, fund raising and organizational skills we need. Few of them have been trained in museum studies curricula.

Several criticized graduate museum studies programs for not including faculty with museum experience:

Many museum studies programs are not taught by museum professionals, but by academics that have rarely set foot inside a museum and have little or no idea - beyond theory - of actual operational / administrative issues. As a result, the graduates seldom meet the needs of the museum field and have difficulty finding work.

At 64, I may be a bit of a dinosaur, but I have never turned to museum studies programs as resources for hiring or advice. In my experience, which I admit may be a bit

jaundiced, most of the people working in these programs [I] have encountered have never worked in a museum.

Another museum leader answered the question “Not all that well. All too often museum programs are taught by individuals with little museum experience. At present, there are literally hundreds of programs, and few good instructors.”

Analysis of responses by museum studies program chairs on how programs are meeting the needs of the museum field were quite varied, but two related themes emerged: innovation and creativity, and practical vs. theoretical curriculum. Reflecting both of themes, one program chair said,

I think there is still too much emphasis on the “how to” and technical sides of museum work and not enough on the theoretical, social, and creative sides. One of our biggest challenges is how to “teach” students to be creative and innovative; to not just want to get a credential so they can get a job that is already clearly defined and laid out. We have become very utilitarian and consumer oriented.

Reflecting the theme of innovation and creativity, another program chair said, “I think museum studies programs really push the field along because they require students to read creative material that many professionals are not reading. Then they go into the field and push new ideas and new approaches on the older, entrenched staff.” Another emphasized balance by saying, “We must support and foster their creativity and at the same time give them the practical tools to be successful by presenting a realistic picture of the not for profit world. It is a lot to absorb.”

Another program chair commented, “The fact that we have professional training programs is in and of itself a big step--such programs are relatively new to the field. One of the dangers of 'professionalizing' a field is that it can tend to stifle innovation.”

Several responses focused on the theme of practical vs. theoretical curriculum. For example, one program chair said, “I think many of them are still too theory based. Students need real, practical experiences.” Another commented,

I think ours is doing just fine. We integrate theory and practice tightly because we believe in it and because our students come here on weekends from their jobs and demand it.

Despite my (recent) Ph.D., I am rather suspicious of programs that grow out of academic disciplines where an understanding of the visitor experience is likely to be limited.

Another said, “I believe that theory, technology and practical application are all important to the development of graduates who will enhance the museum field in the future.”

One program chair commented on the impact of the current generation of museum studies graduates on the museum profession:

I think the kind of training that museum studies programs provide [prepares] students/anyone who are better equipped to go into a museum environment and succeed at their jobs. They are better informed, more sensitive to a whole range of issues, cognizant of museum theory etc. This knowledge translates directly into improved institutions. As these individuals move into leadership roles in the future (after the baby boomers depart), we'll see the true effect of museum studies on the profession.

Diversity in the Museum Profession

Museum leaders and museum studies program chairs were asked “Do you believe diversity (racial, ethnic, gender, etc.) should be increased in the museum profession?” Thirty-six museum leaders (97%) answered in the affirmative and only one (3%) answered no. Twenty-eight (97%) program chairs answered in the affirmative and only one (3%) answered no. Both groups were then asked “If you believe diversity should be increased in the museum profession,

what do you believe should be done to accomplish this?” Three themes emerged for both groups in the analysis of responses: financial (salary, scholarships, and paid internships), recruitment, and museum audiences.

Reflecting the financial theme, one museum leader commented, “I doubt the situation will change much as long as talented minorities can find satisfying, and much better paying, work in related fields.” Another said, “I think a big challenge is salary...Really sharp folks can make a lot more money in many other fields and they have to be really interested and willing to work for less.” Several museum leaders also mentioned the need for scholarships targeted toward minorities who are interested in museum work.

Regarding recruitment, several museum leaders mentioned the need for creative programs designed to recruit minorities into museum positions or into academic programs. One museum leader said,

I believe the best way to attract minorities to the field is to provide opportunities for young people in the final two years of high school or throughout their college years to see and experience what museum work includes. Internships and fellowships are critical in providing this window into the profession. Furthermore, these experiences need to be grounded in the museum itself, not a classroom. In some ways, museum work still operates according to an apprenticeship model, whereby a master professional can train a newcomer while on the job. The now defunct Coca-Cola fellowship program at the Atlanta History Center provided the best exemplar of this approach.

Another museum leader similarly recommended:

Interaction with students at an early age to make them familiar with museums and to create interest and awareness of career opportunities. Interaction with secondary students

for self study/practicum projects to provide additional exposure to career opportunities within the profession. Mentorship programs for potential museum career individuals in high school and college.

Several museum leaders called for museums to be more flexible in their hiring specifications. For example, one said, “Hire and integrate in the organization even if they don't have the big degrees. It is these people who live the life and know firsthand of their culture, community, etc., instead of the scholar who received a master's or Ph.D. through books and the academic world”

Regarding the theme of museum audiences, several museum leaders stressed that museum audiences must become more diverse before diversity can be increased in the museum profession. As one museum leader said, “First, museums need to connect with diverse audiences more effectively. We will never recruit a more diverse group into the museum profession if they haven't had exposure as a visitor/participant.”

As mentioned above, museum studies program chairs emphasized the same three themes as museum leaders in discussing ways to increase diversity in the museum profession. Regarding the theme of finance, one program chair commented, “Professionalize the field. Unless adequate pay and benefits are offered, relative to the training investment required up front, neither gender nor racial diversity will be achieved. Simply put, museum jobs must be more attractive and competitive in comparison with other fields.” Other program chairs mentioned the need for more funding for scholarships and paid internships, especially for their programs.

Regarding the theme of recruitment, one program chair said,

Many museum studies programs are still overwhelmingly full of white women. Programs should do more to attract minority students, and men. Faculty should actively recruit in

undergraduate programs of museum related disciplines, paying special attention to minority students with interest and high academic potential.

Several program chairs stressed the need for museums and museum studies program to reach out to youth and college undergraduates. For example, one said,

Perhaps the most useful programs I have witnessed involve middle and high school students in museum projects or internships in which they contribute important research and/or develop museum displays. Such programs not only introduce students to museum professions, but provide opportunities for tangible accomplishment. Undergraduate museum internships are also useful.

Finally, some museum studies program chairs were critical of museums for not working to diversify their audiences. As one program chair commented,

Many museums are still not welcoming places for diversity. They give lip-service to it, but their program and services are still segregated. That is, they do the black history exhibition for February and the women's history exhibition in March. They don't really want urban teens, unwed mothers, or those they perceive as loud ethnics in the museum and they know that these folks may scare away their rich donors. To increase diversity museums need to commit to really diversifying their collections, programs and their perspectives and being truly welcoming to everyone in the neighborhood.

Another program chair said,

Enhance efforts to engage under-represented communities in the museum experience. Museums need to do a better job of making what they do accessible to such communities. If such communities learned to appreciate and value museums, then more members of those communities would be interested in pursuing careers in the museum profession.

Internships and Field Experiences

Museum studies program chairs were asked to describe the internships or other field experiences in museums in their program curricula. Twenty-five of the 28 program chairs who responded to this question named internship programs, most of them required components of their curriculum. Several program chairs provided details of their internships:

One program chair described, “360 hours of internship required for graduation.

Internships are required to be in a museum and require a signed agreement with supervising institutions. Students are required to develop an internship notebook.

Everywhere I go in the museums community, I am asked for interns to be placed. Our students do a required, and for the most part an additional, elective internship. Some organizations are actually offering paid internships. Some students have gotten jobs where they began as interns. They must keep a detailed hour by hour journal of the work they do as interns and at the end of the semester must submit a paper documenting what they learned during the internships. Faculty keeps in touch with the internship supervisors.

Students must complete either a six-month, full-time internship or write a thesis. Up to six hours of academic credit for a practicum in the museum can count as elective course hours towards the degree.

One half time internship in an art museum or gallery, in any department required in fall semester; a full time internship is required in the summer and may be in any location.

We have a detailed set of guidelines and evaluation criteria.

Each student is required to complete two 150 hour internships in different museums. The internships must produce a product that benefits the host museum and the interns' professional development.

Summary

Chapter 4 presented the descriptive and statistical analysis of the data generated in this study. The chapter included analysis of response rate and sample size and a description of the characteristics of both sample groups and the graduate museum studies programs represented in the study. It also presented the rating of competencies for each group and statistical analysis of the ratings using the Mann-Whitney U test to determine whether there are statistically significant differences in the distribution of ratings for each competency between the museum leaders and museum studies program chairs. From these results, two lists were compiled: competencies that are *most valued* by museum leaders and competencies that are *most emphasized* in graduate museum studies programs. The analysis of the quantitative data culminated in a comparison of the competencies most valued by museum leaders with those most emphasized in graduate museum studies curricula (see Table 33 on page 158). The chapter concluded with a presentation of the findings based on open-ended questions. The data presented in Chapter 4 form the basis for the findings, conclusions, recommendations for practice, and recommendations for future related research presented in the next chapter, to which attention is now turned.

CHAPTER 5

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The review of the history of museums and museum work in the United States included in Chapter 2 showed that museums have gradually redefined themselves in recent decades in efforts to become more relevant to society. The museum field is rapidly changing and has been marked by increased specialization (Boylan, 2006). According to the American Association of Museums (AAM), it is an enormous field with over 400,000 people working in over 17,500 museums in the United States (“AAM: About Museums,” 2012). In Alabama alone, there are at least 154 museums located in nearly every county across the state. (“Alabama Museums Association: List of Museums,” 2012). Many of Alabama’s public universities host museums of various types, a function of higher education that goes back to the ancient centers of learning such as the famed museum and library at Alexandria founded in 280 B.C. (Woodhead & Stansfield, 1989). As the museum field has grown and museums have sought to become more relevant to society, museum studies--a relatively new field of study--has sought to define itself and become more relevant to the museum field. The 54 university-based graduate museum studies programs that have evolved over the past hundred years in the United States offer master’s degrees and certificates and have worked to develop curricula that meet the needs of the museum profession, in an attempt to find the right balance between theory and practice while making decisions on what knowledge and skills are most important for inclusion.

Starting with two major reports of the 1970s—the International Council of Museums’ (ICOM) *Professional Training of Museum Personnel in the World* (1972) and the AAM’s *Museum Studies: A Curriculum Guide for Universities and Museums* (1973), which called for greater professionalization within the museum field, leading practitioners and scholars have

called for more rigor and specialized curricula for entry-level museum professionals. Scholarly assessments by Porter (1991), Glaser and Zenetou (1996), and Genoways and Ireland (2003) have argued that graduate museum studies programs were needed, and that their curricula must be relevant to the field's needs.

The goal of this study was to assess how graduate museum studies programs are meeting the current and anticipated future needs of the museum profession. This study therefore conducted a comprehensive assessment to determine the knowledge and skills *most emphasized* in graduate museum studies curricula and those *most valued* by leading museum practitioners. A total of 38 leading practitioners were surveyed, with names taken from lists of board members of AAM and the American Association for State and Local History (AASLH) from 1991-2010. Responses were compared to those provided by a total of 32 respondents from the 54 leading educators from graduate museum studies programs across the United States identified from the directory maintained by the Smithsonian Institution Center for Education and Museum Studies (2011). The survey took the International Council of Museums' International Committee for the Training of Personnel (ICOM-ICTOP) (2000) competencies across five major areas, comparing the responses of the two groups on 65 items (summarized in Table 33 on page 158) in addition to collecting responses to open-ended questions. By comparing perceptions of leading professionals and leading educators, practical insights as to if the curricula emphasizes the competencies most valued by museum leaders can be made, that in turn can lead to improvements in practice. Although much has been written that questions the *need* for museum studies training, and even today a small minority of museum leaders still question the very existence of a museum "profession," precious little research has been conducted to evaluate the appropriateness and

relevance of specific elements of graduate museum studies curricula at universities across the United States.

This chapter discusses the findings and conclusions of this study and presents recommendations for graduate museum studies programs, the museum profession, and for areas of future research. The chapter is divided into five sections. The first section presents findings that answer the research questions based on results presented in Chapter 4. The second section presents conclusions made by the researcher based on the findings. The third section describes implications for graduate museum studies programs and the museum profession and includes recommendations for practice. The fourth section provides recommendations for future related research. The final section provides concluding thoughts on the study as a whole.

Findings

Finding 1: In general, graduate museum studies programs are meeting the current and anticipated future needs of the museum profession through their curricula.

For every one of the 65 competencies rated in this study, museum studies program chairs indicated a level of knowledge or ability achieved by their students that is at least as high as the level that museum leaders indicated was needed for entry-level museum professionals. For example, museum leaders rated the competency “collections management policies” with a median score of 2.0, indicating that they expect entry-level museum professionals to be able to perform tasks related to this competency with supervision. Graduate museum studies program chairs rated this item with a median score of 4.0, indicating that they believe that upon completion, their students are able to perform tasks related to this competency without supervision.

This finding is supported by authors such as Genoways and Ireland (2003) who argue that through their curricula, graduate museum studies programs across the United States are meeting the needs of the museum profession by providing entry-level professionals who already know the basics of museum work. This can effectively reduce the amount of time spent learning these basics from “typically eight to ten years of on-the-job learning down to approximately two years in a program” (p. 10), an especially important point in smaller museums that may lack highly specialized staff.

Museum leaders represented in this study also support this finding. Two-thirds (67%) of respondents believe that graduate museum studies programs are appropriate preparation for entering the museum field. As one museum leader commented, “I think it [museum studies] is extremely helpful to enter the field. Museum studies and public history programs that balance theory with exposure to real institutions, leaders, and staff through class presentations, field trips, and internships vastly benefit the student.” These findings suggest that the 54 university-based graduate museum studies programs through their master’s degrees and certificate curricula are producing qualified entry-level museum professionals who are meeting the needs of the field.

Finding 2: For entry-level museum professionals, museum leaders value skills and knowledge related to museum administration and management and the public dimension of museums over skills and knowledge related to collections management and care.

The results presented in Chapter 4 showed that the 20 competencies most valued by museum leaders were all from the categories of general, museology, management, and public programming. They include none of the 18 information and collections management and care competencies. A closer look at the museum leaders’ most valued competencies reveals that most are related either to museum administration and management (interpersonal relationships,

professionalism, financial management, information technology, project management, vision) or the public dimension of museums (museums and society, community museology, roles and functions of museums, community relations, public programming communications, exhibitions, program development). The two highest rated competencies by museum leaders were interpersonal relationships and professionalism.

It may be that senior museum leaders value the same areas of skill and knowledge in entry-level professionals that they believe are important for their own positions. The higher value placed by museum leaders on management and education, the so-called public dimension related competencies, over collections-related competencies reflects the attributes that writers such as Suchy (2000) say are important for today's museum directors. Suchy argues that the 1990s saw a major shift in the United States in the role of museum directors toward "managing financial challenges and shaping changes in the museum's form and function" (p. 59). Suchy suggested that by the beginning of the 21st century, a "new breed" (p.59) of museum directors emerged who are "well educated (but not primarily scholars), communicators, organizers, educators, high-energy individuals, enterprising, possessing good political and public relations skills, and who run their museums as businesses based on participatory leadership" (p. 59). Boylan (2006) too describes a shift away from "scholar-curators" (p. 418) in leadership positions that has accompanied the "expansion of the museum's role into new important areas of responsibility, particularly the increasing recognition that museums must accept a far wider educational and social role within their society and community" (p. 417). AAM has further emphasized the importance of the public dimension of museums with its landmark 1992 report *Excellence and Equity: Education and the Public Dimension of Museums* (Hursey, 1992) which asserts that all aspects of museum work contribute to the museum's educational roles. Ledbetter (2011) says

that over the last 20 years, “*Excellence and Equity* launched a revolution in museums’ understanding of themselves and their public service role” (p. 21).

Finding 3: There are differences between what is most valued by museum leaders and what is most emphasized in graduate museum studies curricula, especially in the areas of financial management, information technology, public program communications, and information and collections management and care.

As mentioned above, regarding the primary research question, “How are graduate museum studies programs in the United States meeting the current and anticipated future needs of the museum profession?,” this study showed that they are meeting the needs quite well in that for every one of the 65 competencies rated, museum studies program chairs indicated a level of knowledge or ability achieved by their students that is at least as high as the level of knowledge or ability that museum leaders indicated was needed for entry-level museum professionals. A closer look at the competencies *most valued* by museum leaders, and those *most emphasized* in museum studies curricula, however, shows that the following three competencies most valued by museum leaders are not among those most emphasized in museum studies curricula:

Financial Management (General Competency) - Ability to match financial resources and activities, ensure accurate calculations of receipts and expenses and assess financial status at a given time.

Information Technology (General Competency) - Knowledge of and ability to use a full range of technologies from manual to electronically complex to manage, create and disseminate information and to understand its character as intangible heritage and its preservation requirements; understanding role of information technology in museum practice.

Communications (Public Programming Competency) - Knowledge of communication theory, the dynamics of symbolic experience, developing communication linkages and creating relevant focal points and forums for exchange of ideas, signage (labeling, etc.), intangible and tangible heritage in communicating with the visitor – including storyline as a tool to combine tangible and intangible heritage.

The findings of this study based on open-ended responses strongly reiterate the importance of these three competencies and underscore the need for their inclusion in graduate museum studies curricula. Financial management and communications emerged as important themes when museum leaders were asked to identify the most important competency. Communications, in particular, was mentioned most often as the most important competency and as the competency most often lacking in applicants.

Finance also emerged, along with information technology, as the strongest themes among responses related to the changing needs of the museum field. As one museum leader lamented, “I wish that it were not so, but the museum field is more and more concerned with money. How to get it, account for it and how to spend it well. Mostly how to get it.” Another said, “The ability to develop profit centers within the museum is a growing area of needed expertise.” One museum leader claimed, “I tell students that the sooner they learn about how to develop and manage a budget and manage a project, the sooner they will advance.”

Regarding information technology and its relevance to the changing needs of the museum field, many museum leaders commented on its importance in museums while stressing that the use of technology stay balanced with educational experiences with real objects. As one museum leader described,

Proliferation of electronic media will undoubtedly change how museums communicate with their public audiences and the nature of the museum experience for visitors. The supremacy of visitor interactions with authentic materials--whether they are historic, artistic, scientific, or living collections--will prevail for some segments of the public. But others who look to museums primarily as sources of information may avail themselves of that learning through virtual, rather than physical, mechanisms.

Another museum leader commented,

Obviously IT skills and the ability to use these skills to further the museum field [are needed]. At the same time I think we need to remember that the basis of the museum are artifacts--that is the heart and soul of what we do--preserve them for the future and interpret them for our current visitors. Use of media, etc. is great, but only if it helps understand the artifact, etc. that it is interpreting.

It may be that information technology is not emphasized in museum studies curricula because faculty find that today's students in higher education increasingly enter their programs with more knowledge of technology than even they may have. A similar situation exists in museums as many young museum professionals enter the workforce with strong technological skills. As one museum leader commented, "...the entry-level workers may have competencies in these areas that far exceed the capacity of employing institutions to take advantage of them." The same may be true for graduate museum studies programs. Faculty may choose to place more attention on curricular areas for which students have not been exposed, such as museum collections management.

Finally, it should be noted that many (17) of the competencies most emphasized in museum studies curricula are not among those most valued by museum leaders. Most notable is

that eleven of the information and collections management and care competencies are among those most emphasized in curricula, but none of these competencies are among those most valued by museum leaders. As described in Chapter 4, a statistically large degree of difference was found in median scores for each of these competencies between the two groups. It may be that museum studies educators believe that entry-level museum professionals must understand and appreciate the long term investment in museum collections and curatorship issues, even if their jobs are not in those areas upon entry. It may also be that the senior museum leaders responding to this survey are, in their own positions, primarily concerned with administration, public relations, and fundraising, and their responses may have been influenced by what they themselves know or do not know.

Finding 4: Museum leaders want entry-level museum professionals to have real world experience, underscoring the need for a strong closely-supervised internship experience.

The responses to open-ended questions in this study include repeated references to the importance of real world experience in museums. As one museum leader said, “there is a lack of on-the-job experience such as would be gained in an internship or in a non-professional position such as a site guide or education assistant.” When asked “How do you believe one should prepare for entry into the museum field?” nine of the museum leaders emphasized experience in their responses. One museum leader elaborated,

Nothing beats practical experience. Internships, volunteer experience and most importantly understanding governance by committing the time to serve as a board member of some type of non-profit (not necessarily a museum). The best internships are ones which give the student a broad view of what a museum is and how all the pieces fit together to form a functioning whole.

Another commented, “The hands-on experience is much more valuable in my opinion. In most cases, the best employees we hire have had extensive experience in museums through internships or volunteer activities.”

Throughout the history of the development of museum studies programs in the United States as described in Chapter 2, the importance of providing students with real world museum experience has been emphasized both in the development of curricula in the early programs, and in the development of national curricula guidelines starting in the 1970s. The University of Iowa program, started in 1908, was very skill oriented and included hands-on projects in exhibition techniques and taxidermy at a time when properly trained professionals were in very short supply (Cushman, 1984). Likewise, John Cotton Dana’s Newark Museum training program, started in 1925, focused on public programs and museum education and was primarily an experience-based apprenticeship program (Booth, 1928).

The International Council on Museums (ICOM) and the American Association of Museums became very involved in making recommendations for curricula in graduate museum studies programs between 1973 and 1983 (ICOM, 1972; AAM Museum Studies Committee 1973, 1978a, 1978b, 1980; AAM Professional Practices Committee, 1983). Each of these reports published in that era emphasized the importance of providing practical experience for students through museum studies curricula. The American Association of Museums’ 1978 *Minimum Standards for Professional Museum Studies Programs* even devoted an entire section to spelling out minimum standards for internships. Like previous AAM reports, the current AAM Committee on Museum Professional Training (COMPT) *Standards and Best Practices Guidelines* (2004) also calls for internships and field experiences to be included in curricula.

Some of the museum leaders who emphasized real world experience in their responses were stressing the importance of field experiences in graduate museum studies curricula. Others, however, were arguing that experience working in a museum was preferable to a museum studies degree. As one museum leader commented, “A degree is great, but nothing beats actually working in a museum.” Dillenburg (2006) argues that experience gained in museums, but in the context of museum studies courses, provides a more valuable experience than experience gained outside of a higher education program [on-the-job]. Experience is not valuable unless the individual can learn from it, and “this is where museum studies gives students an edge” (Dillenburg, p. 67). Because two-thirds of museum leaders now believe that a graduate museum studies education is appropriate preparation for entering the museum profession, and many museum leaders emphasize the importance of real world experience, it may be that graduate museum studies programs can meet the needs of the profession by emphasizing closely-supervised internships in the context of a program of study that also emphasizes theory and knowledge.

Finding 5: Diversity is strongly valued by museum leaders and museum studies program chairs, but students in most programs are overwhelmingly white and female.

Although the focus of this study was primarily on how graduate museum studies programs are meeting the needs of the museum profession through their curricula, it should be noted that this study revealed that diversity in the museum profession, an area not addressed by the rating of competencies, is strongly valued by museum leaders and museum studies program chairs as a need. Ninety-seven percent of museum leaders and 97% of museum studies program chairs felt that diversity should be increased in the museum profession. In their responses to

open-ended questions, some museum leaders commented that graduate museum studies programs can play a role in increasing diversity through the recruitment of minority students.

These findings are supported by experts in the field including Elizabeth Merritt (2010), Founding Director of the American Association of Museums' Center for the Future of Museums. According to Merritt, only 20% of museum employees are minority races. Merritt quotes Eric Siegel, director of the New York Hall of Science, who said "too many middle aged hypereducated white people are going to limit the degree to which museums incorporate other points of view" (p. 30).

The quantitative findings of this study indicate that graduate museum studies programs are not meeting the needs of the profession in terms of providing a diverse pool of graduates. The graduate museum studies programs represented in this study show a lack of student diversity. As shown in Chapter 4, analysis of the average number of completions by gender shows that women made up the majority of students completing degrees or certificates in represented programs at 82% compared to men with 18%. Analysis of the average number of completions by race shows that Non-Hispanic whites comprised the largest racial group at 77% compared to Hispanics at 8%, African-Americans at 6%, and "other" at 10% in an America that is increasingly diverse. The 2010 Census found the combined African-American, Hispanic, Asian, Native Hawaiian/Pacific Islander, and American Indian/Alaskan Native, and "other" population to be 127 million, or 41% of the total population of the United States (U.S. Bureau of the Census, 2011). Trends show that racial diversity is increasing as shown in Table 34.

Table 34. *Population by Race in the United States in 1980 and 2010, Number and Percent of Total Population*

	1980		2010	
	Number	%	Number	%
Non-Hispanic White	180,256,366	79.6	196,817,552	63.7
African-American	26,495,025	11.7	38,929,319	12.6
Hispanic	14,608,673	6.4	50,477,594	16.3
Asian/ Native Hawaiian/ Pacific Islander	3,500,439	1.5	15,214,265	5.0
American Indian/Alaskan Native	1,420,400	0.6	2,932,248	.9
Other	6,758,319	3.0	19,107,368	6.2

Note. Source is U.S. Bureau of the Census (2002, 2011). Population percentages do not total 100, as the census data notes that Hispanic people can be of any race.

Finding 6: There are some misconceptions among museum leaders about what graduate museum studies programs do.

The open-ended responses in this study showed that some museum leaders have strong opinions about the appropriateness of museum studies as a route of entry into the museum profession. Some emphasized the importance of real world experience or academic training in a subject discipline over museum studies education. These responses suggest that museum leaders do not believe that museum studies graduates have real world experience or a strong background in a subject area discipline. Nearly all program chairs included in the study, however, described extensive internships required by their programs. Some described the importance of field experiences in courses across their curricula. The prevalence of internships and field experiences in museum studies curricula is supported by the qualitative findings of Dillenburg (2006), described in Chapter 2, which show multiple examples of the importance of practical experience in graduate museum studies programs. Many program chairs also stressed that their programs balance subject area education with museum coursework. Furthermore, nearly half of graduate

museum studies programs offer a certificate in museum studies that accompanies a master's degree in a subject area discipline.

Several museum leaders criticized graduate museum studies programs for having faculty without real world museum experience. This may also reflect a misconception. As described in Chapter Four, 84% of the sample of museum studies program chairs in this study have worked full-time in museums and 41% currently work in a museum in addition to serving as program chair. Furthermore, 62% of program chairs have over ten years of full-time experience in museums, and 46% have over 20 years of full-time museum experience. This study also found that 58% of all faculty in represented graduate museum studies programs have experience working in a museum. Clearly, many graduate museum studies programs have faculty with a great deal of museum experience. It may be that this misconception is caused by a lack of communication between museum studies faculty and sufficient numbers of museum practitioners, perhaps caused by the wide geographic distribution of graduate museum studies programs.

It may be that misconceptions exist among museum leaders included in this study because most do not have personal experience with a graduate education in museum studies themselves. Most (63%) entered the field over 30 years ago, when graduate museum studies was much less established in the United States. Only nine of the 38 museum leaders included in this study reported having a degree in museum studies and only 17 reported that they have ever taken a single course in museum studies. A survey of mid-level museum staff might have revealed fewer misconceptions because they may have entered the museum profession more recently, when graduate programs in museum studies were more established.

Finding 7: There are eight identifiable key characteristics of graduate museum studies programs.

Key characteristics of graduate museum studies programs can be identified from data provided in this study by participating program chairs about themselves and their programs.

1. Many program chairs have extensive museum experience (46% have over 20 years and 62% have over 10 years of full-time work experience in a museum).
2. Many programs (41%) are chaired by faculty who also hold positions in museums.
3. The most common credential offered by graduate museum studies programs is the master's degree (78%). A certificate is the second most common credential offered (50%).
4. Roughly half of graduate museum studies programs are organized as distinct academic units (47%) while 53% are administered through another academic department such as art/art history, history, or anthropology.
5. Most graduate museum studies programs (88%) are general programs that prepare graduates for work in various types of museums. Only 13% of programs prepare graduates for work in specific types of museums (art and history).
6. The average size of graduate museum studies programs by number of annual student completions is 14.
7. Most students completing graduate museum studies programs are women (82%) and non-Hispanic white (77%).
8. Programs more commonly utilize adjunct (part-time) faculty (49%), or full-time faculty shared with other departments (36%), over having their own full-time museum studies

faculty (15%). The average faculty size of graduate museum studies programs is 10, but the average number of full-time museum studies faculty is only 2.

Thus, these eight key characteristics of graduate museum studies programs provide information on the organization and administration of programs, size of programs, and characteristics of students and faculty that should be useful to researchers and higher education institutions considering the establishment of new graduate museum studies programs and strengthening of existing programs.

Conclusions

Conclusion 1: Curricula in graduate museum studies programs are relevant to the current and anticipated future needs of the museum profession.

Graduate museum studies programs should be praised for staying relevant in an era that has proven to be one marked by rapid change in museums. Of course, as emphasized in the findings of this study, the ability to keep up with changing technology is a major concern of museum leaders. In the 21st century, keeping up with technology is a concern in many fields, including the colleges and universities to which graduate museum studies programs are attached. Museums, however, have undergone more profound change in recent decades. Glaser and Zenetou (1996) argue that since the 1970s, museums in the United States have been in an era of “crisis and marked by diversity.” Although “crisis” may be an overcharged word, this point is likely valid. Museums are reflective, and have engaged in countless self-study and strategic planning activities in recent decades to examine their purposes and changing roles in society.

This author argues that this “era of reflection” has spawned a new era beyond Glaser and Zenetou’s (1996) framework of the history of museums in the United States. This new era can be characterized as “an era of museums as agents of social change.” It is marked by the expansion

of the museum's role beyond being active members of their communities, into, as Boylan (2006) argues, playing a role in the *shaping* of their communities. For example, Boylan (2006) points out that museums around the world have not only reached out to, but involved, previously underrepresented disadvantaged peoples and have expanded their activities to include empowerment of these peoples.

In this era of museums as agents of social change, this author believes that the interdisciplinary nature of museum studies curricula has contributed greatly to its ability to maintain relevance. Schwarzer (2012) speaks highly of the interdisciplinarity of graduate museum studies curricula, stating that "Museum studies melds theories, methodologies and research from a cornucopia of disciplines, encouraging cross-comparison and synthesis. Museum studies alumni bring new knowledge and new ways of thinking to the field, and thousands of cultural institutions have benefited" (p.24). Furthermore, university-based graduate museum studies faculty are actively engaged in research and programs that support the new role of museums as agents of social change. As Schwarzer points out, "They have advanced the field's level of inquiry, research and community building. Practitioners are typically mired in the day-to-day with little time to reflect on or integrate new trends into their work. Yet universities' stock-in-trade is reflection and futuristic thinking" (p. 24).

Conclusion 2: There is broad agreement between museum leaders and graduate museum studies programs on what is important for entry-level museum professionals, but limited disagreement in several areas, most notably, collections management and care. There is also still some limited disagreement on whether museum skills are best learned on-the-job or through a university-based graduate museum studies program, but the weight of evidence shows a trend toward graduate museum studies.

In the comparison of the 20 competencies most valued by museum leaders and the 34 competencies most emphasized in graduate museum studies curricula, this study clearly found that there is broad agreement concerning the importance of many areas of skill and knowledge. Seventeen competencies are categorized in this study as being both most valued by museum leaders *and* most emphasized in graduate museum studies curricula (see Table 33 on page 158). As described in Finding 3 above, however, there is some disagreement in the areas of financial management, information technology, and public program communications, which are most valued by museum leaders but not most emphasized in graduate museum studies curricula. Furthermore, 11 of the 18 information and collections management and care competencies are most emphasized in graduate museum studies curricula, but not among the competencies most valued by museum leaders.

It is notable that traditional museum-specific areas, especially collections management and care, are highly emphasized in museums studies curricula even though these areas are not the most important for museum leaders. It may be that museum leaders did not rate the information and collections management and care competencies highly in this study because they were asked to rate the competencies according to the level that they believe is necessary for entry-level museum professionals in general, not for specific areas of work within a museum. They may have viewed these competencies as only being important for those who work specifically in museum collections. It may also be that museum leaders do not value collections related competencies as highly as other areas of skill and knowledge because they may feel that these skill-related competencies are best learned on-the-job. It may also be that senior-level museum leaders, such as those included in this study, most of whom are from large institutions, placed less emphasis on collections related competencies because they are further removed from these

activities than mid-career museum professionals. Finally, it may be that graduate museum studies programs strongly emphasize collections management and care because collections are at the heart of museum work and represent an area that includes completely unique knowledge and skills. When developing curricula, museum studies faculty may seek to focus on those areas that set their field apart from other fields. As described in Chapter 2, one of the key issues in the debate over whether museum work qualifies as a profession is whether it has sufficiently developed its own unique values, knowledge and skills (Genoways, 2006). The recognition of museum work as a profession is central to the justification for the existence of museum studies programs and the formal teaching of knowledge and skills unique to museum work through higher education institutions. Because there is a long history of debate over the existence of a museum profession and the legitimacy of museum studies as a field of study, as described in Chapter 2, museum studies faculty may feel the need to emphasize those areas of knowledge and skills that are completely unique to museum work.

While some disagreement still exists as to whether museum skills are best learned on-the-job or through a university-based graduate museum studies program, the weight of evidence shows a trend toward graduate museum studies. As described in Chapter 2, the history of museum work in the United States was marked by debate over the appropriateness of education in the skills and knowledge specific to museum work and a gradual acceptance of graduate education in museum studies as a legitimate route of entry into the museum profession. The debate began at least a century ago when, at the fifth AAM annual meeting in 1910, some argued that the skills and knowledge needed by museum directors was so diverse that no single school could provide them, nor could they be obtained in any one occupation or locality (Crook, 1910). Frederic A. Lucas, curator at the Brooklyn Institute of Arts and Sciences, forebearer of the

Brooklyn Museum (of art), closed the discussion by saying, “I do believe a curator is born and not made. I do not believe you can train a man to be a curator. He is the result of the combination of natural ability and circumstance” (AAM, 1910, p. 64). According to the meeting proceedings, the general opinion reached was that while varied training and experience were essential, a successful curator must have “pronounced natural gifts” for museum work (AAM, 1910, p. 64).

For at least the last 20 years, graduate-level museum studies education has been clearly accepted as a legitimate route for entering the museum profession. As Glaser (1987) points out, “Skepticism about museum studies as one route into the museum field was once the norm, but has now virtually disappeared” (p. 273). As described in Chapter 4, 24 (67%) of the museum leaders included in this study indicated that they believe academic training in museum studies is appropriate preparation for entry-level museum professionals, but 12 (33%), a relatively large number, indicated that museum studies is not appropriate preparation. This statement is tempered by the fact that many of the museum leaders in this study are from large institutions that are better prepared to internally provide on-the-job training. While the debate over the legitimacy of museum studies has greatly subsided, the open-ended responses in this study also show that the skepticism has not “virtually disappeared” as Glaser (1987, p. 273) argued. Some museum leaders still prefer the traditional route of entry to museum work in which students earn a graduate degree in a museum-related subject area, such as art or art history, and museum-specific skills and knowledge are learned on-the-job. As one museum leader stated,

My advice to young people weighing a career is to get a firm grounding in the subject area of their interest--history, art history, anthropology, etc.--and worry less about the professional aspects of museum work. Most of that can be taught within the work

environment or through workshops or other educational means that take far less time and money than a two-year museum studies program.

Conclusion 3: Graduate museum studies programs are not meeting the diversity needs of the museum profession.

This study found that 97% of museum leaders and 97% of graduate museum studies program chairs feel that diversity should be increased in the museum profession. Lufkin (2009) notes the lack of meaningful statistics on diversity in the museum workplace, but points out that “you do not have to look at major U.S. art museums for long to realize that most of the senior management is white, unlike staff at comparable levels in corporations, universities and government offices” (p. 29). Lufkin interviewed a number of well-known museum figures who agree. Ford Bell, President of AAM says, “If you go to a museum, and don't see anybody else who looks like you, from visitors to staff, and the boards are not reflecting the community, you may be less likely to come back, or even to go in the first place” (Lufkin, p. 29). Arnold Lehman, Director of the Brooklyn Museum, says that diversity is “a critical issue” and that “the most important book any museum director should read is the U.S. Census” (Lufkin, p. 29). Lehman goes on to say that if demographic changes in the U.S. population continue at the current rate, museums will have to embrace diversity to survive. If they do not, according to Lehman, “they will be either figuratively or literally out of business” (Lufkin, p. 29). Clearly, diversity is an important issue facing the museum field.

As described in the above findings, most graduate museum studies programs represented in this study show a lack of student diversity. Students in most programs are overwhelmingly white (77%) and female (82%). It may be that members of minority races have not had sufficient exposure to museums to warrant their consideration of museum work as a career opportunity. As

one museum leader responded in this study “First, museums need to connect with diverse audiences more effectively. We will never recruit a more diverse group into the museum profession if they haven't had exposure as a visitor/participant.” Because degrees in museum studies are primarily at the graduate level, it may also be that more diversity is needed at the undergraduate level in museum-related content disciplines such as art history, history, anthropology, and the natural sciences. These programs are, after all, the primary routes of entry into graduate museum studies programs. In an America that has become 36% minority, the importance of this conclusion cannot be understated (U.S. Bureau of the Census, 2011).

Conclusion 4: Museum studies has emerged as a legitimate field of study in graduate schools in the United States.

As described above, graduate-level museum studies education has been accepted as a legitimate route of entry to the museum profession. It has also emerged as a legitimate field of study. As described in Chapter 2, Jay Rounds (2001) responded to arguments that museum studies is underdeveloped as a discipline by conducting an empirical citation analysis of recent journal articles and books to determine if a core literature in museum studies had developed. He constructed a database that included 6,110 citations made to 2,538 different source items. Rounds found a significant number of highly-cited sources. Most of the highly-cited authors (80%) were associated with museums, contradicting dissenters who argue that museum studies literature is merely borrowed from academic disciplines. Rounds concluded that while much more research is needed, a core literature has clearly emerged. Schwarzer (2012) agrees, pointing out that “In the 1970s, scant literature on museum history, theory, or operations existed; now hundreds of excellent sources are in print” (p. 24).

There are 54 graduate programs in the United States that identify themselves as “museum studies” and offer either a degree or certificate (“Smithsonian Institution Center for Education and Museum Studies,” 2011). As described in Finding 7 above, this study identified key characteristics of graduate museum studies programs, some of which are evidence of the emergence of museum studies as a legitimate field of study. First, 78% of these programs offer a master’s degree, typically an M.A. or M.S. Second, roughly half of these programs are organized as distinct academic units in their institutions, as opposed to being administered through another academic department. Third, programs have an average of 14 student completions each year. Finally, programs have an average faculty size of 10, but 49% of these faculty are adjuncts and 36% are shared with other departments. Clearly, museum studies has emerged as a legitimate field of study in graduate schools in the United States, and particularly at flagship universities. (See Table 2 on page 58 for a complete list of the 54 graduate museum studies programs identified by this study).

Recommendations for Practice

Recommendation 1: Graduate museum studies programs should make adjustments to their curricula, if necessary, to ensure that they adequately emphasize museum administration and management, the public dimension of museums, and that they provide adequate opportunities for field experiences and closely-supervised funded internships.

Museum leaders like those surveyed in this study often make decisions about minimum job requirements and hiring for entry-level museum professionals. It is therefore in the best interest of the 54 university-based graduate museum studies programs to pay attention to what is valued by museum leaders and make adjustments to their curricula in order to stay relevant and make their graduates more employable. As described in Finding 2 above, this study found that

the competencies most valued by museum leaders are mostly related either to museum administration and management (interpersonal relationships, professionalism, financial management, information technology, project management, and vision) or the public dimension of museums (museums and society, community museology, roles and functions of museums, community relations, public programming communications, exhibitions, and program development). Graduate museum studies programs that are in the process of developing new curricula or shaping existing curricula should consider placing more emphasis on these areas.

Graduate museum studies programs should pay special attention to the three competencies that this study found to be *most* valued by museum leaders that were not among those *most* emphasized in museum studies curriculum described in Finding 3 above. These three competencies are financial management, information technology, and communications in public programming.

As museum studies faculty make difficult choices about reducing emphasis in certain areas, they should consider lessening the amount of time spent on information and collections management and care. This study found that seven of the information and collections management and care competencies are among those most emphasized in curricula, but none from this category are among those most valued by museum leaders. This author is not arguing that these curriculum areas should be eliminated. Every single competency rated by museum leaders in this study had at least a median score of 2.0, indicating a basic level of knowledge or ability is expected for entry-level professional positions.

Most graduate museum studies program chairs represented in this study described required internships as important parts of their curricula. Considering the great emphasis that museum leaders placed on learning museum skills through practical experience, graduate

museum studies programs should continually reassess the effectiveness of their internship programs. In addition, the museum field needs more funded internships to attract top students and minorities. Graduate school deans need to recognize the uniqueness of the graduate museum studies field and support paid internships in the same manner as graduate assistants. In their open-ended responses, many graduate museum studies program chairs also stressed the importance of field experiences in courses across their curricula. Programs should continue to emphasize these field experiences and work with museums to seek out new opportunities for class projects.

Close supervision of interns by graduate museum studies faculty and museum supervisors is essential for a quality internship experience. Faculty need to communicate regularly with interns to ensure that they are engaging in museum work that is both challenging and relevant to their course of study. Good communication can also ensure that students are making intellectual connections between theory and practice. Field visits by faculty can be expensive for graduate museum studies programs, so they may want to explore the use of “Skype” or other means of videoconferencing for faculty to meet regularly with students and their museum supervisors. As discussed in Finding 6 above, museum leaders may have misconceptions about graduate museum studies programs because of lack of communication between faculty and sufficient numbers of museum practitioners. Close contact between graduate museum studies faculty and museum intern supervisors may help correct some of these misconceptions. It may also help graduate museum studies faculty stay better informed about the personnel needs of the museum field.

Recommendation 2: The American Association of Museums Committee on Museum Professional Training (AAM-COMPT) should consider restructuring its “Standards and Best Practices Guidelines” to allow for the inclusion of specific curricular areas with emphasis

placed on museum administration and management, the public dimension of museums, and closely-supervised funded internships and field experiences.

Some authors have criticized the AAM-COMPT *Standards and Best Practices Guidelines* (see Appendix F), for not staying up-to-date or not going far enough to emphasize the need for field experiences in museums (MacLeod, 2003; Genoways, 2006). Unlike the 1978 and 1983 AAM reports on museum studies which listed specific curricular areas or competencies, the current COMPT guidelines, issued in 2004 (Phyllis Hecht, personal communication, 2012), only list nine somewhat vague items in the curriculum, or “program content,” section of the document. The omission of specific competencies is deliberate. According to the guidelines, COMPT clearly recognizes the broad spectrum of graduate museum studies programs and intentionally avoids a “one size fits all” approach (AAM-COMPT, 2004, p. 1). Some believe it is time for AAM-COMPT to initiate the development of a new set of curricula guidelines that addresses the new needs of the museum profession (Fuller, 2005).

This author believes that the AAM-COMPT should consider restructuring its guidelines to list specific curricular areas. Although the list does not necessarily have to be as detailed as the ICOM-ICTOP guidelines (see Appendix G), it would be beneficial for graduate museum studies programs, especially new programs, to have a list of areas of knowledge that an official body such as the AAM-COMPT has endorsed as being valuable for museum studies education.

As described in Recommendation 1 above, this study found that the competencies valued most by museum leaders are mostly related either to museum administration and management, or the public dimension of museums. This author recommends that these areas be emphasized in the AAM-COMPT *Standards and Best Practices Guidelines*, should the document be restructured to

allow for the listing of specific curricular areas. In addition, the guidelines should emphasize the importance of field experiences across curricula and closely-supervised funded internships.

Recommendation 3: The American Association of Museums should implement a formal accreditation program for graduate museum studies programs.

As described in Chapter 2, leading experts, including writers (Glaser and Zenetou, 1996; Reynolds, 2000; and Genoways, 2006) have argued that AAM should expand their successful museum accreditation program to include formal accreditation for graduate museum studies programs. Accreditation could serve to raise the stature of graduate museum studies programs both on their campuses, and in the museum profession as a whole. Regarding the issue of accreditation for museum studies programs, Schwarzer (2012) questions,

What is wrong with pushing for excellence and setting higher expectations in such key areas as core curriculum, evaluation, student learning outcomes and competencies?

Various professional committees have repeatedly advocated for higher standards, yet the documents they have generated on this topic remain in small circles. It is time for museums and trainers to come together to articulate and widely communicate the core attributes of a quality museum studies program (p. 53).

Should AAM develop such a program, the findings of this study could be used in the development of curriculum guidelines that are used in the accreditation process. AAM-COMPT should work with the Council of Graduate Schools, the nation's oldest and largest organization devoted to the promotion of quality graduate programs in our nation, to develop minimum standards for accreditation. AAM could model the graduate museum studies accreditation process after its museum accreditation program that employs a "standardized process of self-study and peer review that incorporates multiple perspectives to ensure balance and fairness"

(AAM: “A Higher Standard: The AAM Museum Accreditation Program,” 2012). The AAM Museum Assessment Program (MAP), a grant program that funds museum self-study activities and visits by peer reviewers could serve as a model for a “Museum Studies Assessment Program” that could assist graduate museum studies programs in preparing for the accreditation process. The Kresge Foundation, which recently provided a \$100,000 grant to AAM for the restructuring of its museum accreditation program (Kresge, 2008) could provide funding to AAM for the development of a national museum studies accreditation program.

Recommendation 4: Graduate museum studies programs should identify and develop effective strategies for recruiting more male and minority students to increase diversity.

As described in Conclusion 4 above, graduate museum studies programs are not meeting the diversity needs of the museum profession. As a well-defined route of entry into the museum profession, museum studies programs have the potential to play an important role in increasing diversity in museum work. Because graduate museum studies programs in the United States are overwhelmingly made up of whites and women, programs should develop strategies to recruit more male and minority students.

Merritt (2010) suggests a multi-stage approach to increasing diversity in the profession that includes museum studies programs:

Eighty percent of museum studies students are white and 80 percent are female—we can’t diversify by competing for the few diverse members of the pool of people already committed to museum careers through this pipeline. We need to tackle this problem at all stages—increase awareness of museum careers, recruit more diverse students into museum studies programs and look outside traditional training programs for bright, interested people and then invest in their continued education (p. 30).

The open-ended responses in this study provide some good recommendations for recruiting more diverse students into graduate museum studies programs. Several museum leaders mentioned the need for scholarships targeted toward minorities who are interested in museum work. Others mentioned the need for creative programs designed to recruit minorities into museum positions or into academic programs.

Several program chairs represented in this study stressed the need for museums and museum studies program to reach out to youth and college undergraduates to increase diversity in their programs. For example, one program chair said,

Many museum studies programs are still overwhelmingly full of white women. Programs should do more to attract minority students, and men. Faculty should actively recruit in undergraduate programs of museum related disciplines, paying special attention to minority students with interest and high academic potential.

Another added,

Perhaps the most useful programs I have witnessed involve middle and high school students in museum projects or internships in which they contribute important research and/or develop museum displays. Such programs not only introduce students to museum professions, but provide opportunities for tangible accomplishment. Undergraduate museum internships are also useful.

Finally, one museum studies program chair commented that not much could be done to increase diversity in museum work, or museum studies programs, because of poor salaries in the field. She said, “Unless adequate pay and benefits are offered, relative to the training investment required up front, neither gender nor racial diversity will be achieved. Simply put, museum jobs must be more attractive and competitive in comparison with other fields.”

Perhaps other fields that have developed effective strategies for recruitment of minority students could be studied to identify strategies that could be adapted for graduate museum studies programs. The AAM Standing Professional Committee for Diversity in Museums should work with AAM-COMPT to research effective strategies for increasing diversity and issue a joint policy statement that makes recommendations for graduate museum studies programs.

Recommendations for Future Related Research

Recommendation 1: The AAM Committee on Museum Professional Training (COMPT) should work with the National Center for Education Statistics (NCES) to ensure that accurate data on graduate museum studies programs is captured in the Integrated Postsecondary Education Data System (IPEDS).

As described in Chapter 2, this study identified 54 graduate museum studies programs that offer degrees or certificates in museum studies/museology from the directory provided by the Smithsonian Institution's Center for Education and Museum Studies (2010) (see Table 2 on page 58), but IPEDS data reports only 32 higher education institutions as having completions of graduate degrees or certificates in museum studies/museology in 2010 (NCES, 2011) (see Table 3 on page 59). Many of the programs listed by the Smithsonian Center for Education and Museum Studies (2010) do not appear in the IPEDS report under the category of museum studies/museology. Upon closer examination, it is clear that only those programs that are purely labeled museum studies or museology are reported in this category. Because of the diversity in format, curricular focus, and connections with discipline based academic departments described above, many graduate museum studies programs are spread across a variety of other categories. Some of these programs fall within arts administration or public history while others are connected to a particular academic discipline, such as museum anthropology. It is recommended

that AAM-COMPT work with the national Council of Graduate Schools and the NCES to ensure that accurate data on graduate museum studies programs is captured in the IPEDS. Such data is vital to future research on graduate museum studies programs.

Recommendation 2: A study of the desired level of balance between subject area education and museum studies education should be conducted. Examine differences between graduate museum studies degree and certificate programs and the benefits of each.

As described in Conclusion 2 above, there is still some disagreement on whether museum skills are best learned on-the-job, following graduate study in a subject area such as history, art history, anthropology, or the natural sciences; or through a graduate museum studies program. A proposal should be developed to the Institute for Museum and Library Services (IMLS) for a National Leadership Grant in the “National Forum” category for the purpose of convening a national panel of expert graduate museum studies faculty and leaders in the museum field to discuss the desired level of balance between subject area education and museum studies education. National Forum grants “provide the opportunity to convene qualified groups of experts and key stakeholders to consider issues or challenges that are important to libraries, museums, and/or archives across the nation” (IMLS: “National Leadership Grants,” 2012). The forum will result in recommendations for practice and further research that could form the basis for a second proposal for an IMLS National Leadership Grant in the “Research” category.

Following up on the recommendations made through the national forum, research should be conducted to determine the desired level of balance between subject area education and museum studies. This study found that 76% of graduate museum studies programs offer a master’s degree in museum studies while 50% offer a certificate that accompanies a degree in a subject area discipline (some offer both). Many graduate museum studies programs that offer a

master's degree require that students have previously earned an undergraduate degree in a museum-related academic subject area. A quantitative research strategy could be employed in which museum practitioners are surveyed specifically on the necessary qualifications for entry-level museum professionals with regard to the desired proportion of subject area education to museum studies education. This research should also examine the differences between the structures of master's degree and graduate certificate museum studies programs and examine the benefits of each.

Recommendation 3: Periodically survey recent graduates to evaluate the relevancy and effectiveness of their education in graduate museum studies programs. Also convene focus groups of recent graduates on the value of their graduate education in museum studies.

The populations included in this study were respected museum leaders and chairs of graduate museum studies programs. A future quantitative study initiated by the American Association of Museums' Committee on Museum Professional Training (AAM-COMPT) could survey recent graduates of museum studies programs to determine the relevance of their academic training in museum studies to their work as museum practitioners. Funding should be provided for this research through the IMLS 21st Century Museum Professionals grant program. According to IMLS, the purpose of this grant program is to "increase the capacity of museums to connect people to information and ideas by improving the knowledge and skills of museum staff in multiple institutions." This program provides funding for the "development and implementation of classes, seminars, or workshops that deliver information on how to improve staff practices in the operation of museums [and] resources and activities to support the development of museum leaders" (IMLS: "21st Century Museum Professionals Grants – FY12 Guidelines," 2012).

An ad hoc committee of AAM-COMPT could develop a standardized survey instrument to be utilized by individual programs to gather data from their recent graduates to evaluate the relevance of their own curriculum. This research could be incorporated into existing periodic program assessment activities required in their own institutions. AAM-COMPT could then assemble the data from participating graduate museum studies programs to make general conclusions about the relevance of graduate museum studies curricula in the United States. If the ICOM-ICTOP competencies used in this study are utilized on the AAM-COMPT instrument for recent graduates, the results could be compared and contrasted with the results of this study. A qualitative study could also be done in which focus groups of recent graduates are convened to allow more open-ended dialog on the value of graduate museum studies training in their work as museum practitioners.

Recommendation 4: Study the effectiveness of existing field experiences and internships in graduate museum studies programs and develop strategies for improvement.

Closely supervised internships and field experiences in museums are extremely important to museum leaders and they are important aspects of graduate museum studies curricula as described in the above findings and conclusions, yet there has been no major study on their effectiveness or on how they can be improved. It is recommended that a quantitative study be conducted to measure the effectiveness of internships and field experiences in graduate museum studies programs. A similar strategy could be employed as discussed in Recommendation 3 in which a standardized survey instrument developed by AAM-COMPT is used nationally by individual graduate museum studies programs as part of their own existing institutional program assessments. Programs could require students to complete the survey upon completion of internships to evaluate the educational quality of the internship experiences. AAM-COMPT

could gather the data from participating graduate museum studies programs to make general conclusions about the effectiveness of museum internship experiences across the country. A follow-up qualitative study could also be performed in which museum studies educators, graduate students in museum studies, and supervisors of museum interns in established museum internship programs are interviewed. The quantitative and qualitative findings could then be used to identify best practices and develop strategies for improvement. This research could be part of a larger study that includes Recommendation 3 above with funding provided through the IMLS 21st Century Museum Professionals grant program.

Recommendation 5: Study the training needs of mid-career museum professionals and develop a pilot program for graduate education of mid-career museum professionals in museum studies at a flagship university with an established graduate museum studies program.

This study focused on the training needs of entry-level museum professionals. It is recommended that research be conducted on the training needs of mid-career museum professionals, many of whom have never been exposed to academic museum studies. Funding for research should be provided by IMLS in the form of a 21st Century Museum Professionals grant.

The first step in identifying and addressing the training needs of mid-career museum professionals should be for the American Association of Museums' Committee on Museum Professional Training (AAM-COMPT) to form an ad hoc committee consisting of mid-career museum professionals, leaders in the museum field and graduate museum studies educators. The Council of Graduate Schools and the Association of Public Land Grant Universities should also be invited to participate. The ad hoc committee should initiate focus group studies to identify

areas of skill and knowledge for which professional development is needed and examine how best to deliver this training.

Two well-known and highly successful professional development programs for mid-career and senior museum administrators are the Seminar for Historical Administration of the American Association for State and Local History, and the Museum Leadership Institute conducted by the Getty Leadership Institute at Claremont Graduate University. While highly regarded, these three-week residential programs are not accessible to a large number of mid-career museum professionals because they are highly competitive, geographically dispersed, and they require three full weeks away from job duties and personal commitments. It is suggested that the proposed ad hoc committee discuss how curricula at these programs could be adapted for use in new programs that are more accessible to a larger number of mid-career museum professionals across the United States, and that offer a credential such as a graduate degree. One strategy would be to utilize continuing education programs in some colleges and universities, in conjunction with established graduate museum studies programs, to develop mid-career training in museum studies that is geared toward working professionals, with night and weekend classes. Furthermore, such training could be offered as “executive” master’s level programs similar to the successful executive M.B.A. programs at many colleges and universities. Martha Morris, Associate Professor of Museum Studies at George Washington University is currently exploring the feasibility of developing such a program (personal communication, January 23, 2012). She and other graduate museum studies faculty with interest in this area should be very involved in these discussions. Perhaps this could be best done regionally in a nation as large as the United States, at centers of excellence in graduate museum studies.

The proposed AAM-COMPT ad hoc committee should work with an established university-based graduate museum studies program to develop a curriculum and program of study for a pilot graduate program for mid-career museum professionals modeled on the recommendations resulting from the focus group research. Funding from IMLS and private foundations with long-standing concerns regarding the health and welfare of our nation's museums, such as the Kresge Foundation, W.K. Kellogg Foundation or the MacArthur Foundation should be provided for the development of a pilot graduate program. The pilot program should follow standards for graduate level programs established by regional accrediting agencies such as the Southern Association of Colleges and Schools (SACS). For example, SACS standards require that academic content is more advanced than in undergraduate programs and that curricula includes knowledge of the disciplinary literature and ensures "student engagement in research and/or appropriate professional practice and training experiences" (SACS: "The Principles of Accreditation," p. 30, 2012).

Ongoing feedback from students and faculty participating in the pilot program should be gathered through interviews and questionnaires. Findings should be utilized to make changes to the curriculum and program of study. The program should be further assessed using guidelines developed by the national Council of Graduate Schools in the policy statement, *Assessment and Review of Graduate Programs* (2011). A detailed report should be prepared that can be utilized by other graduate museum studies programs wishing to start similar programs. Should such programs emerge, it is further recommended that AAM-COMPT produce a "Standards and Best Practices Guidelines" document for mid-career professional development.

Commentary

As Sharon Macdonald (2006) argues, “Museum studies has come of age. Over the past decade in particular, the number of books, journals, courses and events dedicated to museum studies has grown enormously” (p. 1) and museum studies has become “one of the most genuinely multi- and increasing inter-disciplinary areas of the academy today” (p. 1). Graduate museum studies programs in higher education have indeed come a long way in a relatively short time. In the first decade of the 20th century, three programs were begun in the United States for the training of museum workers in response to the growing demand created by the rapid growth of museums in the late 19th and early 20th centuries. Two of these three programs emphasized museum collections preservation, to be expected in an era that saw the loss of many aspects of Native American cultures and the near extinction of species such as the buffalo. In the 1920s, the early museum studies programs at the Pennsylvania Museum, State University of Iowa, and Wellesley College were joined by new programs at Harvard University and the Newark Museum. There remained only a handful of museum studies programs until the 1960s and 1970s when there was a rapid proliferation of new graduate programs.

Today there are 54 graduate programs in the United States identified by this study, that are self-described as having a museum studies curriculum and that offer either a graduate degree or certificate. Graduates of these programs can be found working in museums of all sizes and types across the United States. Many are in leadership positions themselves and are redefining the way in which museum studies is viewed by the museum profession.

Some graduate museum studies programs offer a master’s degree. Others offer a museum studies certificate for graduate students majoring in traditional academic disciplines. Some programs specialize in preparing graduates for work in art, history, or natural history museums.

Others emphasize particular types of museum work such as exhibits or museum education.

Museum studies curricula almost always includes elements such as informal learning theory, collecting theory, and museum ethics but also training in technical skills such as storage systems, environmental conditions, and educational program development. Graduate museum studies programs have struggled to find the right balance between theory and practice in developing their curricula, but little previous research has been done to determine what specifically museum practitioners expect graduates of museum studies programs to know.

This study identified the professional personnel needs of the museum profession and found that graduate museum studies programs are meeting the needs well. For every competency evaluated in this study, museum studies program chairs indicated that their students reach a level of mastery at least as high as the level of mastery expected by museum leaders. Nonetheless, there are differences in what is *most valued* by museum leaders and what is *most emphasized* in graduate museum studies curricula, especially in the areas of financial management, information technology, public programming communications, and information and collections management and care. Furthermore, some writers, such as Boylan (2006), have argued that while museum studies training is necessary and appropriate for museum professionals, graduate museum studies programs have struggled to keep up with increased specialization and the changing needs of the museum profession. This study provides current information that will assist graduate museum studies programs in staying current with these changing needs. These findings can be of great use to graduate museum studies programs looking to hone their program's curricula and increase the relevancy of their courses.

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APPENDIXES

APPENDIX A

AAM MUSEUM CLASSIFICATION SYSTEM USED IN THE OFFICIAL MUSEUM DIRECTORY (2009)

ART

Art Associations, Councils and Commissions, Foundations and Institutes
Art Museums and Galleries
Arts and Crafts Museums
China, Glass and Silver Museums
Civic Art and Cultural Centers
Decorative Arts Museums
Folk Art Museums
Textile Museums

CHILDREN'S MUSEUMS

COLLEGE AND UNIVERSITY MUSEUMS

COMPANY MUSEUMS

EXHIBIT AREAS

GENERAL MUSEUMS

HISTORY

Historic Agencies, Councils, Commissions, Foundations and Research Institutes
Historic Houses and Historic Buildings
Historic Sites
Historical and Preservation Societies
Historical Society Museums
History Museums
Preservation Projects

LIBRARIES HAVING COLLECTIONS OF BOOKS

LIBRARIES HAVING COLLECTIONS OTHER THAN BOOKS

NATIONAL AND STATE AGENCIES, COUNCILS AND COMMISSIONS

NATURE CENTERS

PARK MUSEUMS AND VISITOR CENTERS

SCIENCE

Academies, Associations, Institutes and Foundations
Aeronautics and Space Museums
Anthropology and Ethnology Museums
Aquariums, Marine Museums and Oceanariums
Arboretums
Archaeology Museums and Archaeological Sites
Aviaries and Ornithology Museums
Botanical and Aquatic Gardens, Conservatories and Horticulture Societies
Entomology Museums
Geology, Mineralogy and Paleontology Museums
Herbariums
Herpetology Museums
Medical, Dental, Health, Pharmacology, Apothecary and Psychiatry Museums
Natural History and Natural Science Museums
Planetariums, Observatories and Astronomy Museums
Science Museums and Centers
Wildlife Refuges and Bird Sanctuaries
Zoos

SPECIALIZED

Agriculture Museums
Antiques Museums
Architecture Museums
Audiovisual and Film Museums
Circus Museums
Comedy Museums
Communications Museums
Costume Museums
Crime Museums
Culturally Specific
Electricity Museums
Fire-Fighting Museums
Forestry Museums
Furniture Museums
Gun Museums
Hobby Museums
Horological Museums
Industrial Museums
Lapidary Arts Museums
Logging and Lumber Museums
Mappariums
Mining Museums
Money and Numismatics Museums
Musical Instruments Museums
Philatelic Museums

Photography Museums
Religious Museums
Scouting Museums
Sports Museums
Technology Museums
Theatre Museums
Toy and Doll Museums
Transportation Museums
Typography Museums
Village Museums
Wax Museums
Whaling Museums
Woodcarving Museums

APPENDIX B

LIST OF QUESTIONS DEVELOPED BY A.R. CROOK (1910) FOR DETERMINING A CANDIDATE'S FITNESS FOR THE POSITION OF CURATOR OF A MUSEUM OF NATURAL HISTORY

1. In what schools have you studied?
2. What degrees have you received?
3. To what scientific organizations do you belong?
4. State the positions which you have held, the duties involved, and your length of service.
5. What languages other than English do you know?
6. In what countries have you traveled?
7. What have you been interested in collecting?
8. What experience have you had in museum work and in what line are you interested?
9. Have you skill in mechanical work, photography, taxidermy, or field work?
10. In how many of the following have you had a working knowledge and which is your specialty—geology, mineralogy, paleontology, archeology, ethnology, zoology, botany?
11. Give full list of your scientific publications.
12. What skills do you think you possess as a solicitor for materials and money?
13. Along what lines should a museum be developed; in other words, what is the purpose of a museum?
14. Name ten of the leading natural history museums of the world and state the essential character of each.
15. Give titles of the scientific publications issued by three leading museums in America and by three foreign museums.
16. What has been the trend of museum development in America during the past decade?
17. Distinguish between (a) the educational and (b) the scientific work of a museum.
18. Describe the conditions under which a museum should be a conservator of materials and those under which it should be an aggressive agent in educational work.
19. Has it any other function?
20. Define the scope of (a) a university natural history museum; (b) a municipal natural history museum; (c) a state natural history museum; (d) a national natural history museum.
21. State briefly your views as to the relations which a municipal or state museum should maintain with schools, colleges and special students.
22. Explain in detail the age, intelligence and occupation of the people to whom a museum should appeal and how it can best benefit them.
23. To what extent should the growth of a museum depend upon donations and to what extent upon vigorous effort to reach certain ideals?
24. What do you consider the principal requirements for a satisfactory museum building? (Consider at least five points.)
25. Explain the principles of proper labeling, giving an outline of a suitable label for *Amphelis cedrorum*, Cedar Waxwing; for an army field writing desk used by General Grant during the civil war; for a fossil plant; for a mineral.
26. Discuss items to be considered in case construction.
27. Discuss items to be considered in the color scheme of rooms and furnishings.

28. In what order would you arrange the main groups (such as minerals, rocks, reptiles, etc.) starting with those which would be first seen upon entering a museum?
29. Would you arrange a collection of fossils stratigraphically or zoologically?
30. Where would you store a study series collection?
31. Should a museum receive gifts subject to restrictions imposed by the donor?
32. What is the best method of cataloging a museum?
33. Should a museum issue publications of its own, and if so what should be their character?
34. Should a museum maintain a library, and if so what should be its extent and character?
35. Prepare a thesis of not less than 3,000 words summarizing your views as to the proper organization of a natural history museum as regards (a) personnel (b) care of collections (c) exhibits, emphasizing especially that department which is covered by your specialty.

APPENDIX C

**MUSEUM TRAINING PROGRAMS IN THE UNITED STATES IN 1956
IDENTIFIED BY TURNHAM (1956)**

Program	Curriculum Format	Curriculum Content	Duration	Entrance Requirements	Avg. Class Size	Credential Awarded
Yale University	Each course: 2 hours weekly	Two courses: a. art museum techniques & admin. b. research in museum methods	2 years	BA		Minor toward MA or PhD
Winterthur Program in Early American Cultures, Univ. of Delaware	24 hours per week including coursework, museum lab work. Thesis.	American history and the decorative arts	2 years	BA	5	MA
Institute of Contemporary Art, Boston	Apprenticeship program	General art gallery experience	6 weeks	College juniors and seniors	4-5	None
Harvard University	Lectures, demonstrations, practical work in exhibitions, museum field trips	Art museum work, museum problems, curatorship, connoisseurship	2 years	BA	12	MA
Brooklyn Museum	Apprenticeship/fellowship program	Art curatorship	15 mos.	BA plus 2 years graduate study	3	

Program	Curriculum Format	Curriculum Content	Duration	Entrance Requirements	Avg. Class Size	Credential Awarded
Metropolitan Museum of Art/ New York Univ.	Apprenticeship/fellowship program. Includes colloquia and seminars, 2 months travel	Art museum work in various departments	1 year	2 years graduate study	3	Certificate
Oberlin College, Ohio	Lectures, demonstrations, field trips, and practical experience	Art museum methods	2 semesters	BA or qualified undergrad. degree	4-5	3 hours credit toward BA or higher degree
American University, Washington DC	Lectures, workshop, and discussions.	Techniques of historical records management, archival methods	4 weeks		44	Certificate
Radcliffe College, Cambridge, MA.	Lectures and assigned research, observation in historical institutions within 50 miles of Cambridge	Preservation and admin. of historical records	6 weeks	BA or current employment in historical institution	15	Certificate
Henry Ford Museum, Dearborn, MI./Wayne Univ. College of Education	Workshop for teachers and school administrators. Use of community history resources, individual reports.	Audiovisual techniques. Emphasis on school field trips and exhibits as teaching tools.	6 weeks	Teacher's diploma	50	6 hours credit

Program	Curriculum Format	Curriculum Content	Duration	Entrance Requirements	Avg. Class Size	Credential Awarded
Henry Ford Museum, Dearborn, MI./Wayne Univ. College of Education	History museum survey. Lectures and demonstrations.	Museum education. Use of museum in enrichment of teaching. Coordinating the museum with school curriculum.	16 weeks	BA, Teacher's diploma, or undergrad.	34	3 hours credit
Coopers-town Program/NY State Dept. of Ed./ Syracuse Univ.	Seminars in American culture and history. Lectures, demonstrations, laboratories.	Integration of history with daily living	2 week intensive summer course	Current employment in a museum or library, or specialized interest.	245	College credit can be arranged
Coopers-town Program/ National Trust for Historic Preservation	Lectures and demonstrations	Historic house-keeping, preservation techniques, problems of acquisition, preservation, finance, interpretation, public relations.	1 week	Current active participation in operation of historic sites and buildings	60	
Wisconsin State Historical Society Museum/ Univ. of Wisconsin	Lectures	Museum and archival management. Acquisition, interpretation, and preservation.	1 semester	Upperclassmen or graduate students.	6-8	Minor credit toward PhD in History, Anthropology, or art history

Program	Curriculum Format	Curriculum Content	Duration	Entrance Requirements	Avg. Class Size	Credential Awarded
State Museum of Iowa/State University of Iowa	University courses	Preparation and exhibition techniques in biology. Taxidermy	8 under-grad. courses, 6 grad. courses	University entrance	80	Credit towards BA or minor towards MA or PhD
University Museum/ Univ. of Michigan	University courses	Theory, history, and admin. of museums. Methods and techniques, dioramas, etc.		University entrance	7	Credit toward BA
Buffalo Museum of Science/ State Univ. of New York	Apprenticeship program. 16 weeks routine work in each dept. and 16 weeks in specialization.	General methods in a science museum.	32 weeks	BA. Under age 35.	3-5	Certificate from Buffalo Society of Natural Sciences
Buffalo Museum of Science/ Univ. of Buffalo	3 years undergraduate courses, 4 th year in museum full time.	Museum administration. General methods in a science museum.	4 years	University entrance	1	BA
W.H. Over Museum/ Univ. of South Dakota	Lectures, demonstrations, and laboratory	Preparation techniques in geology and anthropology	2 semesters	University entrance		1-3 hours credit towards BA

Program	Curriculum Format	Curriculum Content	Duration	Entrance Requirements	Avg. Class Size	Credential Awarded
National Parks Service, Museum Branch, Washington DC	Full time. Lectures and workshops. Visits to museums.	Theory and practice in planning, execution, and care of exhibits in small museums.	1 month	Park service employees and others selected on basis of college degree and museum experience	8-10	Certificate
Newark Museum, New Jersey	Apprenticeship program. Full time. Rotation in each museum dept. supplemented by lectures and assignments.	General techniques in museums of science, industry, and art.	9 months	BA or BS. Under age 35.	6	Certificate.
University Museum/Univ. of Oklahoma	University course	General methods in a small museum. Admin., finance, conservation, installation, education, public relations, lab. techniques	1 semester	University entrance	7	Minor course towards BA
University Museum/Univ. of Oklahoma	Science teacher's workshop	Theory and practice in exhibits. Community programs, preservation and repair of specimens	2 weeks	Teacher's diploma	3	1 hour credit

APPENDIX D

INTERNATIONAL COUNCIL OF MUSEUMS COMMON BASIC SYLLABUS FOR PROFESSIONAL MUSEUM TRAINING (1972)

1. INTRODUCTION TO MUSEOLOGY. History and purpose of museums.

1.1 General notions of museology and museography.

1.2 General history of museums and collections

1.21 National history of museums and collections (of the country under consideration)

1.3 Role and importance of museums in the modern world

1.31 Professional ethics; principles of deontology

1.32 Museums and national heritage, cultural and natural properties

1.33 Museums and research

1.34 The public and its needs

1.35 General programming

1.4 Various types of museums and study of certain present trends (museums and environment, etc.)

1.5 Main types of legislation concerning museums, in the whole world

1.6 Cooperative ties between museums

1.61 On the national level: associations and networks, meetings and publications, exchanges, etc.

1.62 On the international level (world and regional organizations: UNESCO, ICOM, etc): meetings, publications, exchanges, etc.

2. ORGANIZATION, OPERATION AND MANAGEMENT OF MUSEUMS

2.1 Legal status and administrative setup

2.11 Administrative unit or authority under which the museum is established.

2.12 Administrative boards; trustees

2.13 Operating committees (membership, etc.)

2.2 Management problems

2.21 Scheduling

2.22 Administrative setup of services and departments

2.23 Collections: general considerations and policy of acquisitions

2.24 Insurance

2.3 Budget. Financial resources of museums

2.31 Modes of financing:

2.311 Regular operating budget

2.312 Subsidies

2.313 Donations and bequests

2.314 Friends and members of the museum

2.315 Fund raising and other campaigns

2.316 Admission fees

2.317 Other resources

2.32 Estimate and allocation of expenditures

2.35 Checks and audits

2.4 Personnel: selection and assignments of employees according to the size and role of the museum

2.42 In-training or personnel

2.45 Volunteers

2.48 Labour problems

2.5 General maintenance

2.6 General problems of supervision, safety, custody, etc.

2.7 Public relations

2.8 Evaluation of performance and statistics

3. ARCHITECTURE, LAYOUT, AND EQUIPMENT

3.1 History of museum buildings

3.2 Project (devised according to the programme of the museum): location; use of space; design

3.3 Special problems:

3.31 Building and layout according to the types of museums

3.32 Building and layout according to climates

3.33 Adaptation and use of old buildings (which may or may not be of historical interest)

3.34 Air conditioning

3.35 Lighting

3.36 Safety

4. COLLECTIONS: ORIGIN, RELATED RECORDS, SET-UP AND MOVEMENT

4.1 General principles

- 4.11 Ethics of acquisitions
- 4.12 Acquisition policy
- 4.15 Special problems
 - 4.151 Terms and conditions
 - 4.152 Forgeries
 - 4.153 Copies, replicas, reproductions
- 4.2 Modes of acquisition
 - 4.21 Field gathering
 - 4.22 Purchase
 - 4.23 Donations
 - 4.24 Bequests
 - 4.25 Loans (articles received on loan)
 - 4.26 Deposits
 - 4.27 Exchanges
- 4.3 National parks and their geological and organic properties
- 4.4 Data and documents related to collection items
 - 4.41 Elementary technology: descriptive terminology of certain categories of objects or specimens
 - 4.42 Identification at the time of acquisition:
 - 4.421 Survey questionnaires and acquisition forms
 - 4.422 Field notes
 - 4.423 Techniques for identification, dating processes, etc.
 - 4.43 Registration, inventory
 - 4.44 Numbering and marking of specimens
 - 4.45 Cataloguing and classification
 - 4.451 Descriptive and scientific catalogues
 - 4.452 Guides and forms used by cataloguers
 - 4.453 Types of cards
 - 4.4531 Visual and mechanical types of appliances
 - 4.46 Automatic retrieval: computers, current research
 - 4.47 Types of classifications suitable to museum collections
 - 4.48 Technical files related to collections and/or separate items
 - 4.481 Confidential information
 - 4.482 Restrictions derived from copyright
 - 4.49 Check on displaced collections
 - 4.491 Collections being processed
 - 4.492 Outside shipments; loans
 - 4.493 Outside shipments; deposits
 - 4.494 Exchanges
 - 4.495 Articles disposed of
- 4.5 Audio-visual collections
 - 4.51 Photography and organization of a phototheque

- 4.52 Color slides
- 4.53 Films and filmotheque
- 4.54 Sound recording and phonotheque

4.6 The museum library

- 4.61 Reference works
- 4.62 Classification and cataloguing

4.7 Information on the collections for the use of the public

4.8 Reception, Shipments and storage techniques

- 4.81 Reception of collections
- 4.82 Handling, shipment
- 4.83 Safekeeping and storage, standards
- 4.84 Study collections; collection designed for research

5. SCIENTIFIC ACTIVITIES AND RESEARCH

5.1 Museums and research; general principles

5.2 Research departments in a museum; departments or units; study collections

5.3 The museum, the researchers and/or the outside scientific institutions

- 5.32 The museum and university teaching

5.4 Missions and field work

5.5 Museum reports and publications

- 5.51 Scientific catalogues
- 5.52 Periodical publications
- 5.53 Various publications and reports

6. PRESERVATION AND CARE OF COLLECTIONS

6.1 General principles; active and passive preservation

6.2 Physical, chemical and biological factors of alteration

- 6.21 Temperature
- 6.22 Humidity
- 6.23 Light

6.4 Pollution

6.5 Set-up and operation of workshops and technical and scientific laboratories

- 6.52 Examination of articles; equipment, products, techniques
- 6.53 Treatment; decontamination, hot chambers, etc.

6.531 Treatment of collections according to their nature and their constitutive materials

6.6 Rehabilitation and repair

6.65 Restoration

6.7 Workshops for the preparation and mounting of the collections

6.8 Main principles and special rules for the maintenance of collections

6.9 Records of data concerning the treatment of collections

6.95 Liaison with outside laboratories and workshops; national, international, private

6.96 Liaison with national or foreign agencies or departments concerned with architecture, historical monuments, etc.

7. PRESENTATIONS, EXHIBITIONS

7.1 General theory of communication

7.11 General principles of presentation

7.12 Programming of exhibitions

7.13 Preparation and layout, roles of curator and designer

7.14 Main techniques and basic equipment

7.2 Various types of exhibitions

7.21 Permanent exhibitions

7.22 Temporary exhibitions

7.23 Circulating, moving exhibits

7.24 Various types of didactic and outside exhibitions

7.3 Presentation of related information; main principles

7.32 Graphic aids: labels, etc.

7.34 Audio-visual aids

7.35 Guiding processes

7.4 Operation and evaluation

8. THE PUBLIC

8.1 The museum as a public facility: general principles

8.11 Educational and cultural responsibility of the museum personnel

8.12 Knowledge of the community

8.3 The visitor, his behavior

8.4 Organization of the facilities and services geared to the public

- 8.41 To the incoming visitors; access, parking facilities, etc.
- 8.42 Circuit of visits
- 8.43 Signalization
- 8.44 Information to visitors, guiding
 - 8.441 Written information
 - 8.442 Guided tours
 - 8.443 Automatic guiding
 - 8.444 Audio-visual aide

8.5 Various facilities for public use

- 8.51 Sale counters
- 8.52 Auditorium, lecture room, projection room, movie theater
- 8.53 Lecture room
- 8.54 Workshops available to the public
- 8.55 Comfort of visitors
 - 8.551 Seats, benches, etc.
 - 8.552 Bar, coffee shop, restaurant
 - 8.553 Lounge, rest rooms, cloak room, day nursery
 - 8.554 Facilities for handicapped visitors

8.6 Method of analysis of the visitors' behavior

8.7 Statistics

9. CULTURAL AND EDUCATIONAL ACTIVITIES OF THE MUSEUM

9.1 Public relations

- 9.11 The Society of Friends of the Museum

9.2 Induced activities and leaders or organizers, educational activities

- 9.21 Cooperation between the museum educational personnel and outside instructors

9.3 The museum educational personnel, role and training

- 9.31 Pedagogy for an educational department; principles, methods, equipment
- 9.32 Activities designed for children and youth
 - 9.321 Schools and teachers
 - 9.322 Cooperation with specialists in the field of Education
- 9.33 Activities designed for the country people
- 9.34 Activities designed for illiterates

9.4 Special exhibitions and programs for young people or adults

- 9.41 Demonstrations
- 9.42 Lectures, projections, discussions
- 9.43 Concerts, plays
- 9.44 Participation in events, celebrations, etc. interesting the community

- 9.45 Clubs
- 9.46 Applied work

- 9.5 Publicity; general principles
 - 9.51 Outside signalization; posters
 - 9.52 Press
 - 9.53 Publications
 - 9.54 Radio broadcasts
 - 9.55 Televised shows

- 9.6 Outside departments and museum extension
 - 9.61 Museums and tourism
 - 9.62 Museums and industries
 - 9.63 Travelling museums, mobile museum units
 - 9.64 Loan services
 - 9.65 Outside facilities

- 9.7 Influence of museums on creative activities

APPENDIX E

MEMBERS OF THE AAM MUSEUM STUDIES COMMITTEE OF 1976-1978

Edward P. Alexander, former Director of Museum Studies, University of Delaware

Dolo Brooking, Director of Museum Education, Helen Foresman Spencer Museum of Art,
University of Kansas

Jonathan Brown, Director, Institute of Fine Arts, New York University

Muriel B. Christison, Director, Krannert Art Museum, University of Illinois at Urbana-
Champaign

Carol Clark, Curator of Paintings, Amon Carter Museum of Western Art

John P. Daniels, Head of Education and State Service, John and Mable Ringling Museum of Art,
Sarasota, Florida (Affiliated with Florida State University)

Jane R. Glaser, Program Manager, Office of Museum Programs, Smithsonian Institution

Ben Hazard, Curator of Special Exhibitions and Education, Oakland Museum

Sue Hoth, Co-coordinator, Center for Museum Education, George Washington University,
Washington D.C.

Darwin P. Kelsey, Director of Museum Administration, Old Sturbridge Village, Sturbridge,
Massachusetts

Mary Elizabeth King, Keeper of Collections, The University Museum, University of
Pennsylvania

Raul A. Lopez, Director, Riverside Municipal Museum, Riverside, California

James Mahoney, Chief, Exhibits Central, Smithsonian Institution

Frank J. McKelvey, Jr., Curator of Mechanical Arts, Hagley Museum and Library, Wilmington,
Delaware

Minor Wine Thomas, Jr., Director, New York State Historical Association

Bret Waller, Director, University of Michigan Museum of Art

APPENDIX F

AAM COMMITTEE ON MUSEUM PROFESSIONAL TRAINING STANDARDS AND BEST PRACTICES GUIDELINES (2004)

Museum professional training programs promote a cohesive view of museums as complex organizations, how and where they fit into the larger cultural landscape, and the educational and economic role that they play in society. The education of museum professionals must enable them to meet current challenges and anticipate future needs of very complex organizations subject to ongoing, rapid change.

The membership of the Committee on Museum Professional Training (COMPT) is comprised largely of academic programs, independent training providers and interested museum professionals. These Guidelines are not a "one size fits all" and are meant to be aspired to and adapted by the broad range of member programs.

The Committee on Museum Professional Training has developed this document to serve many purposes:

- Function as guidelines for members of the community of museum professional educators, learners, and professionals in the field.
- Recognize common responsibilities and objectives.
- Identify appropriate content, teaching methodologies, measures for outcomes and assessment.
- Be adaptable to a variety of learning programs.

COMPT's Standards and Best Practices Guidelines are not fixed, but are reassessed and revised as needs and perceptions change.

Program Goals

- Provide excellent education and training of museum professionals that melds the theoretical with the practical.
- Develop leadership abilities and initiative, while stressing the importance of teamwork within and outside of the institution.
- Integrate respect and appreciation for cultural diversity and diverse opinions into the fabric of curriculum content and structure.
- Stress the importance of advocacy within the profession, with the public, and with policy makers.
- Disseminate research through publication and professional practice.
- Acknowledge the value of museum traditions while teaching innovation and creative problem-solving.
- Foster communication and exchange with the museum community and with external audiences.
- Promote ethical and professional behavior in museum practice and all aspects of the field.

Program Content

- Transmission of both theoretical and practical in-depth knowledge of museums, an understanding of the role of museums, knowledge of best museum professional practices, and the creation of lifelong learning goals.
- Curriculum that reflects and responds to current and emergent needs in museums and their communities, including the challenges of new technologies.
- Rigorous standards of scholarship that emphasize the importance of theory and critical analysis.

- Insight into the complex interdependence of professional specializations of the museum field as well as external forces that shape relevant job skills and responsibilities.
- Recognition and understanding of multiple perspectives and the benefits of collaboration and critical thinking.
- Leadership and management training integrated into the curriculum.
- Opportunities for civic engagement and a commitment to serving the public.
- Directed internships, practicums, or fieldwork developed and sustained, that provide essential experience and contacts as appropriate to the pedagogy of the program.
- Teaching competencies that enable learners to be competitive in the job market and empower them to implement effective career planning and development.

Program Instructors and Instructional Approaches

- Significant experience in the field and active engagement in the network of museum professionals.
- Ability to teach in varied learning environments and respond to the needs of diverse learners.
- Expertise in relevant tools, technology, resources and education pedagogy.
- Knowledge of past and current museum literature and related sources and materials.
- Instructional approaches that emphasize research, analytical, and communication skills.
- Pedagogy that fosters creative, critical, contextual thinking and ethical practice.
- Responsibility to develop and/or contribute to innovative teaching methods.
- Practice and encourage respect for high professional standards and workplace behavior.

Program Responsibilities

- Demonstrate the ability to deliver and evaluate promised content, pedagogy and outcomes.
- Provide access to appropriate resources to deliver stated curriculum.
- Provide transparency in program goals, content, requirements, qualifications, standards of evaluation, and outcomes for learners.
- Maintain knowledge of current and emerging issues in order to achieve program currency and relevancy and reflect best practices in the field.
- Develop and implement methods of qualitative assessment.
- Clearly communicate market realities, demands, and compensation.
- Create and sustain a climate of mutual respect that will encourage the free exchange of ideas.
- Further the development of the field of museums and museum training through research, professional participation, and advocacy.
- Mentor and assist learners in the ongoing pursuit of their professional goals and maintain alumni relationships.

Information Services

KNOWLEDGE SHARING

Intellectual Access and Information
Services

Visitor Services

Educational Programming

Public Programming

Interpretation

Publications and Products (Single and Multimedia)

Design

Production

APPENDIX G

RECOMMENDED CURRICULA GUIDELINES FOR MUSEUM PROFESSIONAL DEVELOPMENT, INTERNATIONAL COUNCIL OF MUSEUMS (2000)

I. General competencies:

All museum staff should be able to demonstrate skills in and knowledge of:

Communications

Inter-cultural communication
Written, oral and non-verbal
Terminology / vocabulary

Environmentalism and its impact

Conservation ethic
Environmental audits - compliance, energy, activities, issues
Environmental custodianship
Sustainable development practices

Evaluation methods

Analysis of data
Data collection
Project design
Purpose
Report methods

Financial management

Elementary numeracy
Basic analysis, monitoring, and reporting methods

Information Technology

E-mail
Web sites
Multimedia formats
Database management

Interpersonal relationships

Collaboration and networking
Disability awareness
Strategies for museums
Political considerations

Museums and society

Accountability

Issues of identity and discrimination
Ethnic, racial, cultural and intellectual diversity
Knowledge of local, national, regional, international issues, resources and conditions
Promotion of peace and understanding amongst people
Public trust

Nature of work

Administrative and management policies and practices
Affiliations with other organizations / consultancy / outsourcing
Multi-disciplinary environment
Quality maintenance of services and products

Professionalism

Contributions to field
Continued education
Ethics and values
Personal
Specific to an individual museum and culture
Relative to discipline and occupation
Identity
Intellectual curiosity
Initiative, self motivation, self-evaluation, flexibility
Leadership
Organization of museum associations - local, regional, national, international
Self-management of career
Standard-setting
Recognition and integration of diversity into all processes
Recognition of excellence
Vision of and purpose for museums and personal role at individual institution

Project Management

Delegation and review
Multi-disciplinary environment
Planning and organizing
Priority-setting
Problem-solving
Resource management, implementation and evaluation
Team processes

Research

Ability to seek out and acquire new information, apply learning to tasks
Critical thinking
Methodology

Resources in the field

Literature and information sources including bibliographies, directories and indexes

Professional associations: international, national, regional and local

II. Museology Competencies: Knowledge of and skills in the application of the intellectual foundations of museum work

Community museology

Assessing / understanding community needs

Exhibition techniques as tools for mobilizing community members for the use of their common resources

Interactions between communities, their heritage and economic development

Processes which originate from community efforts

Development of the museum profession

Criticisms of museums

Definitions of / distinctions between / numbers of museums of different disciplines / types

History, philosophies and current status of museums, the profession and collections generally and in local, regional, national and international contexts

Rationale for museums

Roles and functions of museums

Traditional core practices

Leisure and tourism

Identity and nationalism

Vision

Governance

Board (or other governing body) composition

Monitoring responsibilities

Types

Policy making

Roles and relationships

Issues in museum practices

Business orientation vs. larger public "good"

"Collections" vs. "Ideas"

Dominant voice / power in museum interpretation

Cultural democracy

Intellectual access

Physical access

Professional vs. vocational occupation

Repatriation of cultural patrimony, human remains, funerary goods

Legal context for practice

Cultural heritage - local, regional, national and international approaches including conventions
Copyright and artists' rights - national laws and International Conventions
Artistic freedom of expression - local, national and comparative approaches
Political, economic, social and cultural contexts of museums in local, national and international arenas including globalization, environmentalism, sustainable development, and cultural diversity

Research activities, both discipline-based and museological

III. Management Competencies:

Knowledge of and skills in the theory and practice of museum operations

Accreditation

Advisory bodies

Public, professional, discipline-based

Architecture

Accessibility standards
Adaptive use
Environmental controls
Furnishings
Museum architects
Relationship of form and function
Theory and practice of museum architecture:
Discipline, cultural milieu, and climate considerations
Visitor amenities - lounge, restrooms

Business and operational management

Contract management
Policy development
Program development
Goal setting
Priority setting
Clarification of objectives
Strategic planning
Resource management
Implementation
Evaluation

Community relations

Advocacy

Coalition-building
Public programming activities

Financial planning and management

Audit
Budget
Financial control
Documentation
Reporting
Risk management

Formal structure

Authority under which museum is established
Governing laws under which museums are constituted
Articles of incorporation
Constitution and by-laws
Statement of purpose / intent / mission

Fund raising and grant development (income-generation)

Development (income-generation) plan
Record keeping and acknowledgments
Resource identification
Capital campaign
Gifts / bequests
Techniques / Strategies

Human resource planning and management

Allocation of resources
Analysis of tasks
Authority
Compensation structuring (pay/salary scales)
Consultancy and contract workers
Cross-cultural training
Diversity
Hiring (recruiting) / discharge (dismissal) of employees
Labor relations
Management of multi-discipline, multi-cultural teams and organizations
Staff morale and motivation
Performance measures and evaluation
Supervision
Training needs analysis of organization and staff and provision
Volunteers

Income producing activities

Concessions (franchises)
Fees

Retail operations

Information management

Insurance / indemnity

Law

Legal system - national and international comparisons

Legal status of museum

Legal responsibilities of personnel and board

Law and the collection - accessioning, de-accessioning and bequests

Contract law, including loans and exhibition exchanges

Tax law

Marketing

Audience (visitor) research

Promotional materials

Public image

Tourism / business links

Tools for communicating

Membership / "friends" organizations

Services

Hospitality management

Physical plant and site management

Emergency preparedness

Fire, safety, and security

Plant maintenance

Public affairs

Media relations

Organizational Theory

Best practices

Cross-cultural skills

Processes of change

Change management

Models of organizational change

Reflexive practice

Techniques for fostering creative thinking and action in work

Understanding of how innovations emerge within complex organizations

Re-engineering

IV. Public programming competencies: Knowledge of and skills in serving the museum's communities

Communications

Communication theory

Knowledge of the dynamics of symbolic experience

Developing communication linkages and creating relevant focal points and forums for exchange of ideas

Orientation - physical and intellectual

Semiotics - what things signify

Signage (labeling etc.)

Exhibitions

Exhibition theory

Graphics

History and philosophy

Lighting

Planning, design, fabrication, installation and evaluation

Principles of visual presentations

Types / styles of exhibitions

Use of audiovisuals, computers

Virtual exhibitions

Web site creation and management

Education and interpretation

Educational theory, psychology, and sociology

History and philosophy

Learning theory

Planning, design, production and evaluation of programs

Models of practice

Use of text, objects, graphics, manipulative materials and media

Policies

Publications and products

Visitor service and public relationships

Circulation

Local, national, international and regional situations, issues

Management of visitation

Non-visitors characteristics

Numbers and types

Preservation requirements of collection and structure

Visitor characteristics

**V. Information and collections management and care competencies:
Knowledge of and skills in creating, preserving and sharing museum resources**

Archives

Records management

Collections

Access: cultural, physical and intellectual: visitation, tourism

Agents of deterioration: physical, chemical and biological factors

Automation: Computer software and hardware selection

Cataloguing

Collection issues

Collection management

Preventive care

Copies / reproductions / digitization

Copyright

Quality control

Development

Documentation / Data management

Generation, organization and care

Electronic / world wide web aspects

Environmental monitoring and control

Temperature, relative humidity, light and atmospheric pollutants

Handling

History and philosophy

Kinds of collections

Ancillary collections including audiovisuals, slides, negatives

Built environment including sites, landscapes, structures

Cultural heritage including oral history, folklife, language

Documents, manuscripts, archives

Objects, artworks, sculptures, specimens, prints

Packing and transporting

Pest management

Policies

Principles of conservation / restoration

Properties of materials, implications for preservation

Registration

Accession

Deaccession

Disposal Loans

Resources

Standards

Storage

Theft

Use of (in):

Natural and cultural contexts

Exhibitions
Public service role
Research
Library and information services
Scientific activities
Data collection, preparation and analysis
Research design
Phases of the research process
Sampling procedures / survey tools / procedures

APPENDIX H

INSTRUMENT FOR MUSEUM LEADERS

Please indicate the type of museum in which you work. If you are not currently working in a museum, indicate the type of museum in which you have most recently worked.

- Aquarium
 - Arboretum/Botanic Garden
 - Art Museum
 - Children's/ Youth Museum
 - General Museum (A museum that addresses two or more disciplines to a significant extent; for example a museum that interprets both art and history or both history and science.)
 - Historic Home/ Site
 - History Museum/ Historical Society
 - Natural History/ Anthropology
 - Nature Center
 - Science/ Technology Center
 - Specialized Museum (A museum that does not fall into or combine any of the discipline areas listed here.)
 - Zoo
 - Other (not primarily a museum, but with some museum-like functions.)
-

Please indicate the size of your museum by budget. If you are not currently working in a museum, base response on the museum in which you have most recently worked.

- Under \$75,000
- \$75,000-\$250,000
- \$250,000-\$1,000,000
- \$1,000,000-\$4,000,000
- Over \$4,000,000

How many years have you worked full time in the museum field?

- Less than 10
- 10-19
- 20-29
- Over 30

What is the highest academic degree that you have earned?

- Ph.D.
- Professional Degree (MD, JD, DVM, etc.)
- Masters
- Bachelors
- Associates
- High School Diploma
- Other _____

In what discipline is your highest academic degree?

Have you ever taken any courses for academic credit in any of the disciplines below? Check all that apply.

- Museum Studies
- Public History
- Cultural Resource Management
- Historic Preservation
- Arts Administration/ Management
- Arts Conservation

Do you hold a degree or certificate in any of the disciplines below? Check all that apply

- Museum Studies
- Public History
- Cultural Resource Management
- Historic Preservation
- Arts Administration/ Management
- Arts Conservation

GENERAL COMPETENCIES. Please rate the level of knowledge or ability that you believe is necessary for entry-level professional museum positions for each of the general competencies listed. For the purpose of this study "entry-level professional museum positions" are to be considered those positions typically filled with recent college graduates with little employed museum experience. These would include lower level professional positions in museum education, collections, or administration. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000). Following is a list of definitions for items on the rating scale: Basic Level of Knowledge or Ability: Able to perform tasks related to this competency with supervision. Moderate Level of Knowledge or Ability: Able to perform tasks related to this competency with very little supervision. High Level of Knowledge or Ability: Able to perform tasks related to this competency without supervision. Expert Level of Knowledge or Ability: Able to lead and supervise others in tasks related to this competency.

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Communications Ability to listen, speak, write or present (orally and visually) and identify and reach audiences of many diverse characteristics with clear and meaningful messages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmentalism and its impact Understanding and using knowledge of the natural environment, ecosystems and impact of development to promote a "culture of conservation" in all museum activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluation methods Ability to use appropriate methods to assess ongoing project development and to evaluate goal achievements and impacts of museum programs and activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial Management Ability to match financial resources and activities, ensure accurate calculations of receipts and expenses and assess financial status at a given time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>Information Technology Knowledge of and ability to use a full range of technologies from manual to electronically complex to manage, create and disseminate information and to understand its character as intangible heritage and its preservation requirements; understanding role of information technology in museum practice</p>	○	○	○	○	○	○
<p>Interpersonal Relationships Ability to adapt to and work successfully with other people in a variety of ways and circumstances to achieve common goals</p>	○	○	○	○	○	○
<p>Museums and Society Ability to see the museum as an integral part of society and that society's comprehensive heritage, and use it to assist in and contribute to social, economic, cultural and scientific development</p>	○	○	○	○	○	○
<p>Nature of work Knowledge and understanding of the scope of museum work and the roles and responsibilities required in order to achieve organizational goals; relationships with external bodies including museums</p>	○	○	○	○	○	○
<p>Professionalism Ability to work in such a way as to contribute excellence to the museum field for the benefit of the community</p>	○	○	○	○	○	○
<p>Project Management Ability to organize simple or complex processes involving people, financial and physical resources to actualize programs, projects, buildings and revitalization plans over short and long terms</p>	○	○	○	○	○	○
<p>Research Ability to gather information</p>	○	○	○	○	○	○

from a variety of sources to synthesize into topical reports or new knowledge						
Resources in the Field Ability to use the full scope of information and research sources including literature and information sources, professional associations, field work, archaeological excavations, scientific explorations, cultural communities and elders, professional colleagues and other private and public collections, knowledgeable members of the public and other professional and academic communities.	○	○	○	○	○	○

MUSEOLOGY COMPETENCIES: Knowledge of and skills in the application of the intellectual foundations of museum work Please rate the level of knowledge or ability that you believe is necessary for entry-level professional museum positions for each of the museology competencies listed. For the purpose of this study "entry-level professional museum positions" are to be considered those positions typically filled with recent college graduates with little employed museum experience. These would include lower level professional positions in museum education, collections, or administration. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Community Museology Ability to use extensive knowledge of the museum's community (communities) to establish community relationships and meaningful museum collections, programs and activities - inclusive of tangible and intangible heritage, individual and community heritage, commonality and diversity	○	○	○	○	○	○
Development of the museum profession Understanding and using the	○	○	○	○	○	○

full scope of the history and types of museums, the museum profession and their changing perceptions within society						
Roles and functions of museums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vision Ability to see the picture of what the museum can be, to work with others to shape the vision and obtain commitment and to know the ways and processes to achieve the vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Governance Ability to assume and carry out the responsibility to govern, lead and oversee the development of a museum through policy, monitoring and guidelines for an organization held in the public trust and existing for public benefit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Issues in museum practices Knowledge of controversies and differing viewpoints and perceptions both within the museum community and in the perceptions of society at large. Examples include: Business orientation vs. larger public “good” Collections s. “Ideas” – things vs. stories, objects vs. values, artifacts vs. people, tourism vs protection, eco-tourism; dominant voice / power in museum interpretation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal context for practice Knowledge and understanding of the nature and significance of legal frameworks in safeguarding and preservation of heritage and using it to strengthen capacity to do so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MANAGEMENT COMPETENCIES: Knowledge of and skills in the theory and practice of museum operations. Please rate the level of knowledge or ability that you believe is necessary for

entry-level professional museum positions for each of the management competencies listed. For the purpose of this study "entry-level professional museum positions" are to be considered those positions typically filled with recent college graduates with little employed museum experience. These would include lower level professional positions in museum education, collections, or administration. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Accreditation (Certification, Registration) Knowledge of schemes to ensure quality of museums, personnel and activities, for accountability for public funds and public benefit and ability to use them for improvement of quality and pursuing excellence of programs and activities	○	○	○	○	○	○
Advisory Bodies Ability to work with groups constituted to assist museums in improving quality and relevance including public, professional, and discipline-based groups	○	○	○	○	○	○
Architecture Knowledge of accessibility standards, historic preservation, environmental controls, furnishings, museum architects, theory and practice of museum architecture	○	○	○	○	○	○
Business and operational management Knowledge of contract management, goal setting, strategic planning, resource management (facilities, finance, staff), and policy development – including policies on community relations, cultural diversity, tangible and intangible heritage, relationship of museum professional and community knowledge base	○	○	○	○	○	○

and resources, as well as traditional functional policies: collections development and management, acquisition, exhibitions, education, programming and administrative policies						
Community relations Ability to connect the museum to the community as part of the whole, to establish long term relationships and true partnerships to combine forces in heritage preservation and utilization in meeting challenges and creating a desirable future – includes use of techniques, processes and technology in establishing and maintaining effective relations	○	○	○	○	○	○
Financial planning and management Knowledge of audit, budget, financial control, documentation, reporting, and risk management	○	○	○	○	○	○
Formal Organizational Structure Understanding of authorities under which museums are established, governing laws under which museums are constituted, articles of incorporation, constitution and by-laws, statement of purpose / intent / mission – including community relationship, full scope of heritage	○	○	○	○	○	○
Fund raising and grant development (income generation)	○	○	○	○	○	○
Human resource planning and management	○	○	○	○	○	○
Income producing activities including concessions, fees, retail operations	○	○	○	○	○	○
Information Management Ability to use simple or complex technology and utilize	○	○	○	○	○	○

systems to gather, organize, disseminate and use data and information efficiently and effectively						
Insurance / Indemnity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Law Knowledge of legal systems; legal status of museums; legal responsibilities of personnel and board; law and the collection – accessioning, de-accessioning and bequests; contract law, including loans and exhibition exchanges; intellectual property laws; privacy laws; copyright and reproductions; law in the digital world – digital rights management issues and trends; law and ethics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing Knowledge of audience (market) research – including demographics and characteristics of community; visitor research; advertising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Memberships / “Friends” organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical plant and site management Ability to organize ongoing routines and maintenance of physical plant and for safety and protection of staff and public, collections and facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Affairs Ability to manage external general relationships and partnerships of the museum, especially public image and character of the museum, consistency, tone, quality and messages, visual character and design, and diplomatic actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media relations Ability to manage relationships and partnerships with local, regional and national media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Organizational theory Knowledge of best practices and models, cross-cultural skills, processes of change, change management, models of organizational change, reflexive practice, techniques for fostering creative thinking and action in work, understanding of how innovations emerge within complex organizations	○	○	○	○	○	○
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PUBLIC PROGRAMMING COMPETENCIES: Knowledge of and skills in serving the museum's communities. Please rate the level of knowledge or ability that you believe is necessary for entry-level professional museum positions for each of the public programming competencies listed. For the purpose of this study "entry-level professional museum positions" are to be considered those positions typically filled with recent college graduates with little employed museum experience. These would include lower level professional positions in museum education, collections, or administration. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Communications Knowledge of communication theory, the dynamics of symbolic experience, developing communication linkages and creating relevant focal points and forums for exchange of ideas, signage (labeling, etc.), intangible and tangible heritage in communicating with the visitor – including storyline as a tool to combine tangible and intangible heritage	○	○	○	○	○	○
Exhibitions Planning, design, fabrication, installation and evaluation of exhibitions. Knowledge of exhibition theory; graphics; history and philosophy of exhibition; lighting; types / styles of exhibitions; principles of visual presentations –	○	○	○	○	○	○

communicating themes and identifying underlying messages; use of audiovisuals, computers in exhibitions.						
History and philosophy of museum education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educational theory, informal learning theory, psychology, and sociology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program development including planning, design, and production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visitor studies including formative and summative evaluation of programs and exhibitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Models of practice, development of interpretive skills and techniques	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of text, objects, graphics, manipulative materials and media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visitor service and public relationships Knowledge of circulation; local, national, international and regional issues; management of visitation; numbers and types of visitors; visitor characteristics; visitor experiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INFORMATION AND COLLECTIONS MANAGEMENT AND CARE COMPETENCIES:
 Knowledge of and skills in creating, preserving and sharing museum resources. Please rate the level of knowledge or ability that you believe is necessary for entry-level professional museum positions for each of the information and collections management and care competencies listed. For the purpose of this study "entry-level professional museum positions" are to be considered those positions typically filled with recent college graduates with little employed museum experience. These would include lower level professional positions in museum education, collections, or administration. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Level of Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Archives inclusive of intangible and tangible heritage Knowledge of records management / data entry; documentation principles, processes and standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History and philosophy of collecting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledge of kinds of collections (objects, specimens, artworks, sculptures, prints)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collection management – including policies, systems, vocabulary, metadata standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accession, registration, cataloging, record keeping, computer software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage methods and systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of collections in exhibitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to collections cultural, psychological, physical and intellectual – visitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deaccession/disposal procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preventive care; pest management; agents of deterioration: physical, chemical and biological factors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Environment: temperature, relative humidity, light and atmospheric pollutants; monitoring and control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collections handling, moving, packing and transporting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal issues including title, deaccession, intellectual property, copyright	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digitization of collections: planning & implementation, file formats (costs, legal issues), methods, tools, standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conservation and restoration principles, properties of materials, implications for preservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Built environment including sites, landscapes, historic structures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intangible heritage (oral history, folklife, language)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey utilized competencies developed by the International Committee for the Training of Museum Personnel of the International Council of Museums (ICTOP/ ICOM). Do you use these categories when assessing the qualifications of potential staff members?

- Yes
- No

Besides the ICTOP/ICOM competencies, what other categories or competencies do you use for assessing the qualifications of potential staff members?

Of all of the ICTOP/ICOM competencies listed in this survey, which do you feel is the most important, and why?

What skill or competency do you most often find lacking in applicants for entry-level positions in the museum field?

Do you believe that academic training in museum studies is appropriate preparation for entry-level museum professionals?

- Yes
- No

How do you believe one should prepare for entry into the museum field?

Do you believe diversity (racial, ethnic, gender, etc) should be increased in the museum profession?

- Yes
- No

If you believe diversity should be increased in the museum profession, what do you believe should be done to accomplish this?

In your opinion, what are the changing needs of the museum field and what kinds of knowledge and abilities do you foresee will be needed in the future?

In your opinion, how are museum studies graduate programs meeting the current and anticipated future needs of the museum field as a whole, and specifically, museums like yours?

Who do you believe has important roles to play in improving graduate/professional training for museum workers?

Please feel free to use the space below to provide any additional comments you may have regarding any aspect of professional training for museums:

APPENDIX I

INSTRUMENT FOR MUSEUM STUDIES PROGRAM CHAIRS

Museum Studies Program Chairs

Do you currently work in a museum in addition to serving as chair of a museum studies program?

- Yes
- No

Please indicate museum position held in addition to serving as museum studies program chair:

Please indicate the type of museum in which you work in addition to serving as museum studies program chair:

- Aquarium
 - Arboretum/ Botanic Garden
 - Art Museum
 - Children's/ Youth Museum
 - General Museum (A museum that addresses two or more disciplines to a significant extent; for example a museum that interprets both art and history or both history and science.)
 - Historic House/ Site
 - History Museum/ Historical Society
 - Natural History/ Anthropology Museum
 - Nature Center
 - Science/ Technology Center/Museum
 - Specialized Museum (A museum that does not fall into or combine any of the discipline areas listed here.)
 - Zoo
 - Other (not primarily a museum, but with some museum-like functions.)
- _____

What is the highest academic degree that you have earned?

- Ph.D.
- Professional Degree (MD, JD, DVM, etc)
- Masters
- Bachelors
- Associates
- Other _____

In what discipline is your highest academic degree?

Have you ever worked full time in a museum?

- Yes
- No

How many years have you worked full-time in museums?

- Less than 10
- 10-19
- 20-29
- Over 30

Have you ever taken any courses for academic credit in any of the disciplines below? Check all that apply.

- Museum Studies
- Public History
- Cultural Resource Management
- Historic Preservation
- Arts Administration/ Management
- Arts Conservation

Do you hold a degree or certificate in any of the disciplines below? Check all that apply.

- Museum Studies
- Public History
- Cultural Resource Management
- Historic Preservation
- Arts Administration/ Management
- Arts Conservation

What credential is offered by your program? Check all that apply.

- Certificate
- Bachelors Degree
- Masters Degree
- Doctoral Degree
- Other _____

Which best describes how your museum studies program is organized in your institution?

- Program is its own academic unit.
- Program is administered through another academic department or college. Please indicate department: _____

Which best describes the disciplinary orientation of your museum studies program?

- Program prepares graduates for work in various types of museums.
- Program prepares graduates for work in a particular type of museum.

If program prepares graduates for work in a particular type of museum, please indicate the type of museum:

- Art
- History
- Anthropology
- Science/Natural History
- Science/Technology Center
- Other _____

Which best describes your museum studies program's orientation toward particular kinds of museum work?

- Program prepares graduates for a variety of positions in museums.
- Program is oriented toward preparing graduates for work in a particular type of position.

If program is oriented toward preparing graduates for work in a particular type of position, please indicate the type of position:

- Museum Administration
- Museum Education
- Museum Collections
- Other _____

Please indicate the number of students who completed degrees or certificates in your museum studies program in the 2009-10 academic year by gender.

_____ Men
_____ Women

Please indicate the number of students who completed degrees or certificates in your museum studies program in the 2009-10 academic year by race. (Total students should match total in previous question).

- _____ Hispanic
- _____ Non-Hispanic White
- _____ African-American
- _____ Other

Please describe any efforts your program has made to increase racial and gender diversity among your students:

How many of your program's faculty have experience working in a museum?

_____ Number of faculty with experience working in a museum

Please indicate the number of faculty in your museum studies program by faculty status.

- _____ Full-time museum studies faculty
- _____ Full-time faculty shared with other programs/departments
- _____ Adjunct (part-time) faculty

Please indicate the number of faculty in your museum studies program by gender. (Total faculty should match total in previous question).

- _____ Men
- _____ Women

Please indicate the number of faculty in your museum studies program by race. (Total faculty should match total in previous two questions).

- _____ Hispanic
- _____ Non-Hispanic white
- _____ African-American
- _____ Other

Please describe any efforts your program has made to increase racial and gender diversity among your program's faculty:

GENERAL COMPETENCIES. Please rate the level of knowledge or ability that you believe is reached by students through the curriculum of your program for each of the general competencies listed. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000). Following is a list of definitions for items on the rating scale: **Basic Level of Knowledge or Ability:** Able to perform tasks related to this competency with supervision. **Moderate Level of Knowledge or Ability:** Able to perform tasks related to this competency with very little supervision. **High Level of Knowledge or Ability:** Able to perform tasks related to this competency without supervision. **Expert Level of Knowledge or Ability:** Able to lead and supervise others in tasks related to this competency.

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Communications Ability to listen, speak, write or present (orally and visually) and identify and reach audiences of many diverse characteristics with clear and meaningful messages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmentalism and its impact Understanding and using knowledge of the natural environment, ecosystems and impact of development to promote a “culture of conservation” in all museum activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluation methods Ability to use appropriate methods to assess ongoing project development and to evaluate goal achievements and impacts of museum programs and activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial Management Ability to match financial resources and activities, ensure accurate calculations of receipts and expenses and assess financial status at a given time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information Technology Knowledge of and ability to use a full range of technologies from manual to electronically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

complex to manage, create and disseminate information and to understand its character as intangible heritage and its preservation requirements; understanding role of information technology in museum practice						
Interpersonal Relationships Ability to adapt to and work successfully with other people in a variety of ways and circumstances to achieve common goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Museums and Society Ability to see the museum as an integral part of society and that society's comprehensive heritage, and use it to assist in and contribute to social, economic, cultural and scientific development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nature of work Knowledge and understanding of the scope of museum work and the roles and responsibilities required in order to achieve organizational goals; relationships with external bodies including museums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professionalism Ability to work in such a way as to contribute excellence to the museum field for the benefit of the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project Management Ability to organize simple or complex processes involving people, financial and physical resources to actualize programs, projects, buildings and revitalization plans over short and long terms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research Ability to gather information from a variety of sources to synthesize into topical reports or new knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Resources in the Field Ability to use the full scope of information and research sources including literature and information sources, professional associations, field work, archaeological excavations, scientific explorations, cultural communities and elders, professional colleagues and other private and public collections, knowledgeable members of the public and other professional and academic communities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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MUSEOLOGY COMPETENCIES: Knowledge of and skills in the application of the intellectual foundations of museum work Please rate the level of knowledge or ability that you believe is reached by students through the curriculum of your program for each of the museology competencies listed. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Community Museology Ability to use extensive knowledge of the museum's community (communities) to establish community relationships and meaningful museum collections, programs and activities - inclusive of tangible and intangible heritage, individual and community heritage, commonality and diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development of the museum profession Understanding and using the full scope of the history and types of museums, the museum profession and their changing perceptions within society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Roles and functions of museums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>Vision Ability to see the picture of what the museum can be, to work with others to shape the vision and obtain commitment and to know the ways and processes to achieve the vision</p>	○	○	○	○	○	○
<p>Governance Ability to assume and carry out the responsibility to govern, lead and oversee the development of a museum through policy, monitoring and guidelines for an organization held in the public trust and existing for public benefit</p>	○	○	○	○	○	○
<p>Issues in museum practices Knowledge of controversies and differing viewpoints and perceptions both within the museum community and in the perceptions of society at large. Examples include: Business orientation vs. larger public “good” Collections s. “Ideas” – things vs. stories, objects vs. values, artifacts vs. people, tourism vs protection, eco-tourism; dominant voice / power in museum interpretation</p>	○	○	○	○	○	○
<p>Legal context for practice Knowledge and understanding of the nature and significance of legal frameworks in safeguarding and preservation of heritage and using it to strengthen capacity to do so.</p>	○	○	○	○	○	○

MANAGEMENT COMPETENCIES: Knowledge of and skills in the theory and practice of museum operations. Please rate the level of knowledge or ability that you believe is reached by students through the curriculum of your program for each of the management competencies listed. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Accreditation (Certification, Registration) Knowledge of schemes to ensure quality of museums, personnel and activities, for accountability for public funds and public benefit and ability to use them for improvement of quality and pursuing excellence of programs and activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advisory Bodies Ability to work with groups constituted to assist museums in improving quality and relevance including public, professional, and discipline-based groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Architecture Knowledge of accessibility standards, historic preservation, environmental controls, furnishings, museum architects, theory and practice of museum architecture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business and operational management Knowledge of contract management, goal setting, strategic planning, resource management (facilities, finance, staff), and policy development – including policies on community relations, cultural diversity, tangible and intangible heritage, relationship of museum professional and community knowledge base and resources, as well as	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

traditional functional policies: collections development and management, acquisition, exhibitions, education, programming and administrative policies						
Community relations Ability to connect the museum to the community as part of the whole, to establish long term relationships and true partnerships to combine forces in heritage preservation and utilization in meeting challenges and creating a desirable future – includes use of techniques, processes and technology in establishing and maintaining effective relations	○	○	○	○	○	○
Financial planning and management Knowledge of audit, budget, financial control, documentation, reporting, and risk management	○	○	○	○	○	○
Formal Organizational Structure Understanding of authorities under which museums are established, governing laws under which museums are constituted, articles of incorporation, constitution and by-laws, statement of purpose / intent / mission – including community relationship, full scope of heritage	○	○	○	○	○	○
Fund raising and grant development (income generation)	○	○	○	○	○	○
Human resource planning and management	○	○	○	○	○	○
Income producing activities including concessions, fees, retail operations	○	○	○	○	○	○
Information Management Ability to use simple or complex technology and utilize systems to gather, organize,	○	○	○	○	○	○

disseminate and use data and information efficiently and effectively						
Insurance / Indemnity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Law Knowledge of legal systems; legal status of museums; legal responsibilities of personnel and board; law and the collection – accessioning, de-accessioning and bequests; contract law, including loans and exhibition exchanges; intellectual property laws; privacy laws; copyright and reproductions; law in the digital world – digital rights management issues and trends; law and ethics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing Knowledge of audience (market) research – including demographics and characteristics of community; visitor research; advertising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Memberships / “Friends” organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical plant and site management Ability to organize ongoing routines and maintenance of physical plant and for safety and protection of staff and public, collections and facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Affairs Ability to manage external general relationships and partnerships of the museum, especially public image and character of the museum, consistency, tone, quality and messages, visual character and design, and diplomatic actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media relations Ability to manage relationships and partnerships with local, regional and national media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizational theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Knowledge of best practices and models, cross-cultural skills, processes of change, change management, models of organizational change, reflexive practice, techniques for fostering creative thinking and action in work, understanding of how innovations emerge within complex organizations						
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PUBLIC PROGRAMMING COMPETENCIES: Knowledge of and skills in serving the museum's communities. Please rate the level of knowledge or ability that you believe is reached by students through the curriculum of your program for each of the public programming competencies listed. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Communications Knowledge of communication theory, the dynamics of symbolic experience, developing communication linkages and creating relevant focal points and forums for exchange of ideas, signage (labeling, etc.), intangible and tangible heritage in communicating with the visitor – including storyline as a tool to combine tangible and intangible heritage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exhibitions Planning, design, fabrication, installation and evaluation of exhibitions. Knowledge of exhibition theory; graphics; history and philosophy of exhibition; lighting; types / styles of exhibitions; principles of visual presentations – communicating themes and identifying underlying messages; use of audiovisuals, computers in exhibitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History and philosophy of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

museum education						
Educational theory, informal learning theory, psychology, and sociology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program development including planning, design, and production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visitor studies including formative and summative evaluation of programs and exhibitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Models of practice, development of interpretive skills and techniques	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of text, objects, graphics, manipulative materials and media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visitor service and public relationships Knowledge of circulation; local, national, international and regional issues; management of visitation; numbers and types of visitors; visitor characteristics; visitor experiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INFORMATION AND COLLECTIONS MANAGEMENT AND CARE COMPETENCIES:
Knowledge of and skills in creating, preserving and sharing museum resources. Please rate the level of knowledge or ability that you believe is reached by students through the curriculum of your program for each of the information and collections management and care competencies listed. Competencies are adapted from Recommended Curricula Guidelines for Museum Professional Development, International Council of Museums (2000).

	No Level of Knowledge or Ability Necessary	Basic Level of Knowledge or Ability Necessary	Moderate Level of Knowledge or Ability Necessary	High Level of Knowledge or Ability Necessary	Expert Level of Knowledge or Ability Necessary	Not Applicable
Archives inclusive of intangible and tangible heritage Knowledge of records management / data entry; documentation principles, processes and standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History and philosophy of collecting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Knowledge of kinds of collections (objects, specimens, artworks, sculptures, prints)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collection management – including policies, systems, vocabulary, metadata standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accession, registration, cataloging, record keeping, computer software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage methods and systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of collections in exhibitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to collections cultural, psychological, physical and intellectual – visitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deaccession/disposal procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preventive care; pest management; agents of deterioration: physical, chemical and biological factors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environment: temperature, relative humidity, light and atmospheric pollutants; monitoring and control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collections handling, moving, packing and transporting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal issues including title, deaccession, intellectual property, copyright	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digitization of collections: planning & implementation, file formats (costs, legal issues), methods, tools, standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conservation and restoration principles, properties of materials, implications for preservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Built environment including sites, landscapes, historic structures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intangible heritage (oral history, folklife, language)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This survey utilizes competencies developed by the International Committee for the Training of Museum Personnel of the International Council of Museums (ICTOP/ ICOM). Does your program use these competencies in developing curriculum?

- Yes
- No

Other than the ICTOP/ICOM categories, what other categories or competencies does your program use in developing curriculum?

Of all of the ICTOP/ICOM competencies listed in this survey, which do you feel is the most important, and why?

What skill or competency do you most often find lacking in graduates of your program?

Do you believe that academic training in museum studies is appropriate preparation for entry-level museum professionals?

- Yes
- No

Does your program's curriculum require internships or other field experiences in museums?

- Yes
- No

Please describe the internships or other field experiences in museums in your program's curriculum:

How do you believe one should prepare for entry into the museum field?

In your opinion, what are the changing needs of the museum field and what kinds of knowledge and abilities do you foresee will be needed in the future?

In your opinion, how are museum studies graduate programs meeting the current and anticipated future needs of specific museums, and the museum field as a whole?

Do you believe diversity (racial, ethnic, gender, etc) should be increased in the museum profession?

- Yes
- No

If you believe diversity should be increased in the museum profession, what do you believe should be done to accomplish this?

Please feel free to use the space below to provide any additional comments you may have regarding any aspect of professional training for museums:

APPENDIX J

INSTITUTIONAL REVIEW BOARD APPROVAL

March 4, 2011

Office for Research
Institutional Review Board for the
Protection of Human Subjects

William F. Bomar
Director, Moundville Archaeological Park
University of Alabama Museums
Box 870340

THE UNIVERSITY OF
ALABAMA
R E S E A R C H

Re: IRB # 11-OR-066 "An Assessment of Curriculum in Graduate
Museum Studies Programs in the United States"

Dear Mr. Bomar:

The University of Alabama Institutional Review Board has granted
approval for your proposed research

Your application has been given expedited approval according to 45 CFR
part 46. You have also been granted the requested waiver of written
documentation of informed consent. Approval has been given under
expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior
(including, but not limited to, research on perception, cognition,
motivation, identity, language, communication, cultural beliefs or
practices, and social behavior) or research employing survey, interview,
oral history, focus group, program evaluation, human factors evaluation,
or quality assurance methodologies.*

Your application will expire on March 3, 2012. If your research will
continue beyond this date, complete the relevant portions of Continuing
Review and Closure Form. If you wish to modify the application,
complete the Modification of an Approved Protocol Form. When the
study closes, complete the appropriate portions of FORM: Continuing
Review and Closure.


Should you need to submit any further correspondence regarding this
proposal, please include the above application number.

Good luck with your research.

Sincerely,



152 Rose Administration Building
Box 870117
Tuscaloosa, Alabama 35487-0117
(205) 348-8461
FAX (205) 348-8882
TOLL FREE (877) 820-3066


Carpartato T. Myles, MSM, CIM
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama

IRB Project #: 11-OR-066

UNIVERSITY OF ALABAMA
INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator	Third Investigator
Names:	William F. Bomar	Dr. Stephen Katsinas	
Department:	Moundville Arch. Park	Ed. Leadership, Policy, and Technology Studies	
College:	University Museums	Education	
University:	University of Alabama	University of Alabama	
Address:	Box 870340	Box 870231	
Telephone:	205-371-2234	205-348-5622	
FAX:	205-371-4180		
E-mail:	bbomar@ua.edu	skatsina@bamaed.ua.edu	

Title of Research Project: An Assessment of Curriculum in Graduate Museum Studies Programs in the United States

Date Submitted:
Funding Source: None

Type of Proposal New Revision Renewal Completed Exempt

Please attach a renewal application

Please attach a continuing review of studies form

Please enter the original IRB # at the top of the page

UA faculty or staff member signature: [Redacted] 1/18/2011

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: _____ Full board Expedited

IRB Action:

Rejected Date: _____

Tabled Pending Revisions Date: _____

Approved Pending Revisions Date: _____

Approved-this proposal complies with University and federal regulations for the protection of human subjects.

Approval is _____

Items appr _____

Recruitment materials _____ (dated _____)

_____ (dated _____)

Approval signature [Redacted] Date 3/4/2011